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# Training Faculty to Adopt the Ignatian Pedagogical Paradigm, IPP and its Influence on Teaching and Learning: Process and Outcomes

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Published version. *Jesuit Higher Education: A Journal,* Vol. 2, No. 2 (2013): 62-109. Permalink. © 2013 Regis University. This work is licensed under a Creative Commons Attribution 3.0 License.

#### Training Faculty to Adopt the Ignatian Pedagogical Paradigm: Process and Outcomes

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#### Abstract

This is the second of two articles describing the action research undertaken by the three trainees and their trainer (author of this article). After formal training, the training team integrated the Ignatian Pedagogical Paradigm (IPP)<sup>1</sup> into their undergraduate courses from fall of 2010 through May 2013 in the College of Professional Studies (CPS) at Marquette University in Milwaukee, Wisconsin. <u>The first article was published in this journal in fall 2012</u> and provided a narrative describing the faculty development process, predicated on the five constructs of the IPP: Context, Experience, Reflection, Action and Evaluation. This article includes a full description of the training protocol, data collection process, and the qualitative data analysis methods.<sup>2</sup> This training team used an Action Research model put forth by Reil<sup>3</sup> over two years and nine months to determine the influence of the IPP on their teaching. This study seeks to provide others who teach at Jesuit Colleges and Universities a rationale for using the IPP both as pedagogy, a curriculum guide along with specific instructional practices, and learning activities. In addition, a replicable IPP training protocol is provided that is based on best practices derived from analogous research in the fields of contemporary learning, cognitive, and educational research. The study also provides the outcomes related to the impact the infusion of the IPP had on the instructors' curricula, pedagogies, instructional strategies, learning activities, and assessment practices, as well as the student-teacher learning relationship.

#### Introduction

The signature<sup>4</sup> Jesuit pedagogy, the Ignatian Pedagogical Paradigm or IPP, is underutilized at Jesuit colleges and universities. This underutilization is a result of faculty not knowing it exists or knowing it exists and not knowing how to use it, and/or using it without training or documenting its impact on teacher effectiveness and/or showcasing it to their students. As a result, the distinctive Jesuit thinking and learning model (IPP) is not effectively employed by either teachers or students and, as a result, cannot strengthen teaching and learning respectively. When the IPP is not transparently presented to students as the signature Jesuit pedagogy predicated on St. Ignatius' Spiritual Exercises then they are not privy to this uniquely Jesuit method of thinking and learning that can facilitate their attainment of the Jesuit Educational Mission and learning outcomes. The author advocates for Jesuit college and university faculty to adopt the IPP as their pedagogy and teach their students how to use it through required assignments with accompanying rubrics. Therefore, this study

provides a description of the almost-three year IPP training and implementation process, and examines how and in what ways teachers benefit from the infusion of the IPP into their pedagogy, curriculum, instructional strategies, learning activities, and assessment tools. The primary outcome of this study is that the IPP has become both a formative pedagogy for all of the participants in this study as well as a uniquely Jesuit thinking and learning model for their students. Moving forward this faculty group will be training other faculty, as well as formally assessing the impact the IPP has on the students' critical thinking skills. It is hoped that this IPP training and implementation process will be replicated by faculty at Jesuit Colleges and Universities and become a much more widely known and valued resource utilized by teachers and students.

## Brief history of Jesuit education

In the mid-16th century St. Ignatius founded the Society of Jesus<sup>5</sup> and described the model for Jesuit education within his publication titled *Ratio* 

*Studiorum.* <sup>6</sup> As founder of The Society of Jesus, or Jesuits, St. Ignatius also authored the *Spiritual Exercises*<sup>7</sup> for all Jesuits to undertake in order as part of their spiritual formation, relationship to God, and to discern their role in the world in service to others. Currently there are 28 Jesuit Colleges and Universities in the United States and belong to Association of Jesuit Colleges and Universities (AJCU). The AJCU states:

Our primary mission is the education and formation of our students for the sake of the kind of persons they become and their wide influence for good in society in their lives, professions, and service. As Jesuit Colleges and Universities, we are a continuation of the Ignatian heritage and of the distinctive tradition of Jesuit education. This means that St. Ignatius, with his charism and his Spiritual Exercises, inspires and gives shape to how we educate in a way that seeks God in all things, promotes discernment, and "engages the world through a careful analysis of context, in dialogue with experience, evaluated through reflection, for the sake of action, and with openness, always, to evaluation.8

Learning how to discern is one of the primary outcomes the spiritual exercises can facilitate. Lay teachers at Jesuit institutions are not required to undergo this rigorous spiritual examination but can learn how to do this if they participate in one of many voluntary Ignatian Spirituality activities on their campuses. In 1993, the International Commission on the Apostolate of Jesuit Education, ICAJE, constructed the Ignatian Pedagogical Paradigm to extend the process and outcomes of the *Spiritual Exercises* to the classroom for the teachers and their students. The International Commission on the Apostolate of Jesuit Education (ICAJE) worked for over three years on the IPP so that Ignatian values from the *Characteristics* document could be incorporated into a practical pedagogy for use in the way of proceeding between teachers and students in the classroom.<sup>9</sup>

The IPP (see Figure 1) is a thinking and learning model extrapolated from the Spiritual Exercises that a team of international representatives from various Jesuit institutions constructed in Rome in 1993. Like the *Spiritual Exercises*, the IPP relies heavily on reflective practices as it posits guiding constructs for the teacher to adopt as pedagogy, as well as while constructing curriculum and learning activities, i.e., Context, Experience, Reflection, Action and Evaluation.<sup>10</sup> It can be summarized as follows:

# All learning is . . .

- Situated in a specific **context**.
- Rooted in previous **experience** and the result of new *learning experiences*.
- Dependent upon and deepened by reflection about those experiences.
- Made meaningful when new knowledge is put into some kind of **action**.
- Reinforced by explicit **evaluation** (and ultimately, *self*-evaluation) of those actions and the degree to which learning has occurred.

Ultimately, these elements should be understood as representing a *process*, not a *prescription*, for teaching. They function not as discrete segments

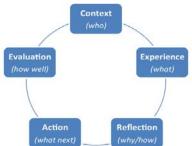


Figure 1 Graphic Representation of the Ignatian Pedagogical Paradigm, Debra Rudder Lohe. Source: <a href="http://www.slu.edu/cttl/resources/ignatian-pedagogy">http://www.slu.edu/cttl/resources/ignatian-pedagogy</a>. Reprinted with permission of Reinert Center for Transformative Teaching & Learning, Saint Louis University.

or stages of a linear process, but as interdependent facets of any deep learning experience.<sup>11</sup> When modeled by their teachers the Ignatian paradigm can help the growth of a student:

- who will gradually learn to discriminate and be selective in choosing experiences;
- who is able to draw fullness and richness from the reflection on those experiences; and
- who becomes self-motivated by his or her own integrity and humanity to make conscious, responsible choices.<sup>12</sup>

The ICAJE recommended that the IPP becomes the pedagogy for Jesuit Educational Institutions. However, it did not provide a training model, an implementation guide, evidence-based learning activities, best practices, or studies with measurable outcomes. It was the ICAJE's hope that Jesuit Educational Institutions would take on these tasks and report back their progress. There is no record or compilation of these activities kept by the ICAJE or within the literature. That void precludes the IPP from being uniformly adopted as the preeminent Jesuit pedagogy. This study attempts to fill that void by providing a training protocol, an implementation guide, best practices, learning activities, and measurable outcomes as a result of four faculty members participating in formal IPP training from fall of 2010 to the present.

# Significance of providing IPP training to lay faculty

Fewer Jesuits are carrying out the unique work of the 28 Jesuit colleges and universities in the United States. Jesuit priests participate in the Spiritual Exercises authored by St. Ignatius to become ordained Catholic priests. Hence, when they become instructors they have been fully immersed and practice this reflective thinking process regularly, which then presumably enhances their teaching pedagogy. However, "In our Colleges and Universities, Jesuits comprise less than five percent of the total number of faculty, staff, and administration. These institutions depend overwhelmingly on lay apostolic partnership or colleagueship.""13 Because of this, all Jesuit Colleges and Universities offer faculty and students opportunities to

participate in processes to become familiar with the role Ignatian Spirituality should have at a Jesuit Educational Institution.

Each of our Colleges and Universities has created responsibilities, structures, and programs for the hiring, orienting, and developing of faculty and staff according to our Catholic, Jesuit mission. We make available special retreats, seminars in Ignatian spirituality and Jesuit education, programs and colloquia which seek to enhance Catholic, Jesuit identity, development and scholarship opportunities, service and immersion experiences, special events that focus on our mission, and we utilize university convocations, conferences, liturgical celebrations, and award ceremonies to articulate our Catholic, Jesuit identity. Some of our Colleges and Universities have established special institutes of Jesuit and Catholic studies. At the same time, we take advantage of several regional and national programs of formation in Jesuit leadership for colleagues in higher education such as the AJCU Seminar on Higher Education Leadership and the Ignatian Colleagues Program. 14

Few if any Jesuit colleges and universities are intentionally, deliberately and/or uniformly training faculty to adopt the IPP as their primary pedagogy much less teaching students how to use it as a learning activity even though it was recommended in 1993 by ICAJE:

An Invitation to Cooperate: Greater understanding of how to adapt and apply the Ignatian Pedagogical Paradigm to the wide variety of educational settings and circumstances which characterize Jesuit schools around the world will come about as we work with the Paradigm in our relationships with students both in and outside the classroom and discover through those efforts concrete, practical ways of using the Paradigm that enhance the teaching-learning process. It can be expected, moreover, that many detailed and helpful treatments of the Ignatian Pedagogical Paradigm will be forthcoming that will be further enriched by the experience of teachers trained and practiced in applying the Paradigm within specific academic disciplines.

All of us in the work of Jesuit education look forward to benefiting from the insights and suggestions that other teachers have to offer.<sup>15</sup>

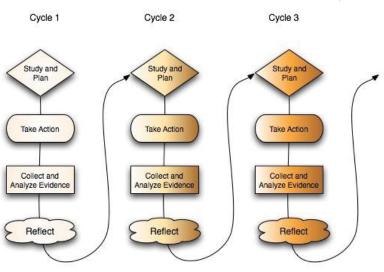
The ICAJE IPP document expresses the expectation that there will be ongoing training and documentation of the training processes following this call to action. After a thorough literature review, the author could not find an IPP training model to facilitate the adoption and integration of the IPP into her pedagogy, or curriculum, or instructional strategies, or learning activities, or best practices. She contacted the ICAJE as well as AJCU,<sup>16</sup> and neither entity had any information regarding the training following the publication of the IPP document.

The author did discover an unpublished dissertation about the IPP and the perceptions of teachers in secondary education in an Australia dissertation,<sup>17</sup> along with numerous lesson plans published online from a variety of sources using the IPP to design their courses.<sup>18</sup> There is a report from a Symposium held in 2001 for Jesuit secondary schools and their work related to infusing the IPP into their pedagogy and curricula.<sup>19</sup> These sources do no provide templates for training faculty, curriculum, instructional strategies, learning activities or measures for outcomes related to the use of the IPP. Therefore, the author developed her own methods of training based on 20 years of professional practice-based experience in the field of education related to the development of pedagogy, curriculum and instruction, learning activities, and assessing for measurable outcomes. The following is a description of the study undertaken over the past two years and nine months:

# Cycle 1: September 2010-April 2011

#### **Explanation of Action Research**

Riel's Action Research model<sup>20</sup> (see Figure 2) is a process of inquiring about one's practice to improve said practice by taking stock in the form of 'reflection.' Upon reflective thought, one makes changes to their processes so that it can improve the research process to be more effective and efficient. There are usually three cycles and four steps within each cycle. It is important to note that one of the most important elements of action research is the change that the researcher experiences, not so much the change they are trying to pursue.



The choice of Action Research as the training team's method to study the impact of the IPP on

Progressive Problem Solving with Action Research

Figure 2 Graphic Representation of the progressive Problem Solving with Action Research Margaret Riel. Source: http://cadres.pepperdine.edu/ccar/define.html. Reprinted with permission of Center for Collaborative Action Research, Pepperdine University. our instructional practices seemed most fitting, given it is specifically designed for educational contexts and that it includes formal reflection as a part of its methodology.

# Context

Over the past 15 years, the College of Professional Studies (CPS) has been an integral part of Marquette University's undergraduate and graduate degree programs. CPS serves adult learners returning to school to complete their degrees and is considered a clinical or practicebased degree program. CPS houses three degree programs: four undergraduate degree programs with concentrations in Leadership and Organizations, Professional Communication, Criminology and Law Studies, and Psychology, and two graduate degree programs with concentrations in Leadership, Public Service, Criminal Justice, and Dispute Resolution.

Dr. Maureen McAvoy became a member of the CPS undergraduate adjunct faculty in 2004 and a full-time faculty member in the college's undergraduate program in 2012. She became aware of the IPP in her first year of teaching in CPS. Infusing the IPP into her course work was a natural fit for two reasons: her research focus is the direct instruction of reflective thinking models/practices to enhance students' critical thinking skills, which is based on her knowledge of the work of various contemporary evidencedbased researchers.<sup>21</sup> Additionally, she teaches at Marquette University (MU), a Jesuit university where infusion of Ignatian spirituality into the classroom is a much encouraged activity. As is the case on most Jesuit college and university campuses, informing faculty about Ignatian Spirituality is a priority. For example, on the MU campus there are numerous opportunities for faculty to learn about, experience, and practice Ignatian Spirituality. The Faber Center promotes Ignatian Spirituality for faculty and staff through retreats that mirror experiencing the Spiritual Exercises. The Manresa Center supports faculty as they progress through their teaching career and facilitates the exploration of the use of Ignatian Spirituality with special emphasis on contemplative practices in their research and classroom instruction.

Through these activities, faculty are encouraged to examine how Ignatian Spirituality can be infused into their teaching rather than providing direct instruction of how the IPP could be used in the faculty member's teaching pedagogy. There is little, if any, documentation of Jesuit colleges and universities training faculty to adopt the IPP as their primary pedagogy, and/or infusing it into their curriculum and learning activities, much less documentation of an implementation process that could be replicated across departments and used with fidelity based on the ICAJE model. As a result, because there is a lack of this documentation of formal IPP training, we do not know the process and outcomes on how infusing the IPP in the classroom impacts faculty and students. If there was documentation the Jesuit educator could learn if the IPP enhances teaching and learning, increases critical thinking skills and reflective thinking practices, deepens awareness of their spirituality, and assists in the discernment of their role in the world in service to others. They might even be able to determine if use of the IPP facilitates the achievement of the Jesuit Education Mission. This study attempts to fill some of those voids.

History of IPP implementation: Dr. McAvoy adopted the IPP as her pedagogy and integrated it into curriculum, instructional strategies, and learning activities for five years prior to training other faculty in her College. She also went one step further and taught the IPP framework to her students by using the ICAJE IPP document as required reading material along with three oral and written assignments that connected the IPP to the course content, and created rubrics to measure the students' understanding and mastery of the IPP within these assignments. As a result, and unexpectedly, the students in her classes became the primary catalysts for the IPP faculty development.

The students voiced their dismay to their advisors as well as to the Associate Dean of CPS that they had not heard of the IPP across their courses in CPS until they were introduced to it in one course as upperclassmen. These students felt strongly that an earlier understanding of the IPP would have more effectively informed them of the unique nature of their Jesuit education and would have benefited their learning, service-orientation, and spiritual development from the beginning to the end of their undergraduate degree. As a first step to responding to the students' requests Dean Robert Deahl and Associate Dean Sandra Cleveland wanted to expose the entire faculty to the IPP as a uniquely Jesuit pedagogy. In spring of 2010, Dr. McAvoy provided the entire CPS faculty a primer on her utilization of the IPP in her courses and hosted a student panel to attest to the value they received from utilizing the IPP. The CPS faculty also heard a reinforcing message from the ICAJE document:

We are convinced, therefore, that staff development programs involving in-service training are essential in each school, province or region where this Ignatian Pedagogical Paradigm will be used. Since teaching skills are mastered only through practice, teachers need not only an explanation of methods, but also opportunities to practice them. Over time staff development programs can equip teachers with an array of pedagogical methods appropriate for Ignatian pedagogy from which they can use those more appropriate for the needs of students whom they serve. Staff development programs at the province or local school level, therefore, are an essential, integral part of the Ignatian Pedagogy Project. 22

The CPS faculty responded positively. As a result of the faculty and student input, Dean Deahl and Associate Dean Cleveland sought to have the IPP integrated earlier and in more courses. They believed that the integration of the IPP into CPS undergraduate courses would enhance the students' achievement of the Jesuit Educational Mission, the Marquette University Undergraduate Mission, and the College of Professional Studies' Mission and Vision. In addition, it would add a dimension to CPS that demonstrated its commitment to following the teachings of St. Ignatius and the ICAJE recommendations.

## Training group formed fall of 2010

Four adjunct instructors who taught required courses were directed to adopt the IPP as their pedagogy and integrate it into their curricula to expose the largest number of students to the IPP. One of these instructors resigned from the training six months after it began due to personal and professional demands on her time, but did assist the training group in the development of the data collection questionnaire prior to her withdrawal. The remaining three instructor trainees were paid an honorarium to participate in the training. The trainees were required to adopt the IPP as their teaching pedagogy, and integrate it into their courses through direct instruction to their students accompanied by required assignments. Rubrics were developed to measure the students' mastery in applying the IPP to their assignments. The trainees collected data to determine the impact of the IPP on themselves and their students, defining measurable outcomes and presenting these outcomes to other faculty. Initially, the training team was focused only on the possible impact the IPP could have on student learning. There was particular interest in discovering if the IPP served to enhance critical thinking skills, as well as a deeper understanding of the Jesuit education mission.

#### Trainer's assumptions and biases

The author had five years of instructional experience infusing the IPP into her pedagogy, curriculum, instructional strategies, student learning activities, and assessment tools. There was sparse literature substantiating the efficacy of adopting the IPP as a primary teaching pedagogy or any literature that provided evidence of the benefits of teaching the IPP to students and expecting them to use it in relation to course content. She reviewed for herself and provided the trainees analogous theory, research and evidence from the fields thinking, learning, cognition, and education. It was these research-based studies that informed her thesis that the IPP could be used as a particular thinking and learning framework, much like those identified in contemporary literature. She based the IPP training protocol on her teaching and student centered classroom experiences using the IPP in three distinct ways: as her pedagogy, an instructional strategy and as a student learning activity. More specifically, one of the learning activities the author used with students compared the IPP to contemporary research that identified thinking and learning models along with the use of guided written reflection activities, which have been shown to increase critical thinking skills in undergraduate students.

# Trainer's classroom anecdotal evidences

Over the five years that the author used the IPP as pedagogy, and an instructional strategy, she found that direct instruction to students regarding the purpose and meaning of the IPP document provided opportunities for them to increase proficiency in their critical thinking skills. The author conjectured that using the ICAJE IPP document as a required reading and writing assignment heightened the students' awareness of the IPP as a uniquely Jesuit pedagogy along with its specific ways of proceeding during the course for both teacher and student. The IPP methodology also gives students a means of attaining the Jesuit educational mission, creating possibilities of an increased proficiency in critical thinking skills through the use of the five IPP constructs, which could, in turn precipitate the students' use of discernment. Discernment then could, in turn, assist the students in attaining the ultimate Jesuit education learning outcome, which is discovering the role God has in mind for them in service to others. The author began by informing the students of what the IPP is and how it can be used to increase their critical thinking skills.

What is needed is a framework of inquiry for the process of wrestling with significant issues and complex values of life, and teachers capable and willing to guide that inquiry...At the same time, it judges slip-shod or superficial ways of thinking unworthy of the individual and, more important, dangerous to the world he or she is called to serve. <sup>23</sup>

The author provided a visual representation to her students. (See Figure 3.)

# Literature review that informed IPP faculty training protocol

Besides defining the length of time required to do this training and explanations of the five constructs, as well as lengthy descriptions of the Jesuit educational ideals based on Ignatian Spirituality, the IPP document does not provide a training protocol. Those items were left for future discourse by Jesuit educators and meant to be documented. Therefore, the author investigated the literature to use best practices for the training process, as well as substantiate her contention that adoption of the IPP by the trainees and integration into CPS curriculum, instructional strategies, and classroom learning activities would inform Jesuit teacher praxis, as well as bolster their students' critical thinking skills

# Training protocol and trainee selection

In general, successful faculty development in higher education includes supportive and encouraging environments where there is an opportunity for collaboration between full-time and adjunct faculty that provides opportunities for collegial support, collaboration, and exchange, which then contributes to effective implementation of pedagogy, curriculum, and instructional practice.<sup>24</sup>

Additionally, the author followed guidelines put forth in the literature regarding communities of practice. Communities of practice rely on participants being reflective practitioners who are part of a group in a shared context who focus on change that promotes "...experimentation, inquiry, and reflection in collegial fashion."25 Rather than focusing only on their personal change, communities of practice focus on transformative change within a system or organization by starting with a core group that initiates and develops the change effort or action plan. The necessary components of communities of practice include an issue(s) that a group of people are interested in examining and dialoging, who then become initiators and implementers of effective practices related to this issue(s). "...people in communities of practice share their experiences and knowledge in free-flowing, creative ways that foster new approaches to problems."26

The Associate Dean intentionally selected the three trainees to participate in the IPP training because they each teach in one of these areas: philosophy, theology, divinity, ethics, and research and statistical methods, all of which involve higher-order thinking skills. Two of the three have Ph.Ds. while the other is completing his at this time, which in educational circles indicates proficiency in the use of executive functions. In addition, these instructors teach in different realms of the curriculum, i.e., Principles of Liberal Studies,

# Mc Avoy: Training Faculty





Research and Statistical Methods, and Systems Thinking. The trainees require students to demonstrate reflective thinking and critical thinking skills within their assignments, and/or by the nature of course content, and by asking questions that provoke students to examine the course content deeply and broadly, not in a cursory fashion. The literature indicates that certain instructional and learning activities are conducive for students to acquire and increase their critical thinking skills:

First, students must be given opportunities to apply critical thinking skills and abilities in a wide range of contexts and subject areas. Second, instruction should emphasize executive functioning or metacognitive skills, such as setting goals, planning, and monitoring progress toward goals. Third, students should be sensitized to deep problem structure, because most students' thinking tends to focus on the surface structure of problems, or the superficial aspects of tasks (Kennedy et al., 1991 Halpern, 1998; Willingham, 2007)<sup>27</sup>

The author's intention then was to provide a supportive, collaborative environment predicated on reflective processes and enlist the trainees to build a community of practice. She believed the trainees could accomplish this, given their previously demonstrated propensity to examine esoteric topics and their willingness and enjoyment to discuss these types of topics with colleagues. She would design activities so the trainees could question heartily, reflect deeply and continuously, and experiment using the IPP. It was hoped that eventually the trainees would spread the word to other faculty and advocate that they, too, adopt the IPP as their pedagogy. Training sessions were scheduled once per month during each academic year, typically from September through May. Agendas and tasks were emailed ahead of each meeting, and minutes, as well as reminders, of the agreed-upon tasks following each meeting were distributed.

## Ignatian Spirituality and IPP training

When instructors adopt the IPP as their pedagogy and integrate it into their curriculum, they demonstrate to their students a distinctive learning process unique to a Jesuit education. Some would argue that immersion in Ignatian Spirituality is a pre-requisite to knowing and understanding the IPP, whereas the author and trainees chose to first utilize the pedagogy as a critical thinking and reflective practices tool. The author believes that when both teacher and student use the IPP, a more thorough examination of ethical, philosophical, and spiritual issues arising from course content can occur. Likewise, when made transparent to teacher and student, the IPP can also lead to discernment like the Spiritual Exercises do. The author advocates for the use of the IPP, period. However, this is not to say that the significance and utility of the IPP can be made stronger through exposure to the Spiritual Exercises and learning about St. Ignatius and his teachings. That information should be provided to students along with the IPP. All of these outcomes are more likely to occur if the IPP is

made visible to both faculty and students, and if both groups know how to use it.

#### Anecdotal and theoretical information

After the training protocol framework was in place, the author researched the literature related to how to train faculty to infuse the IPP into college-level courses, best practices, instructional strategies, and outcomes. The author found a few scholarly discussions about teachers using the IPP. Most were teacher narratives and more theoretical than practice-based. The authors of these discussions were proponents of using the IPP to infuse Ignatian Spirituality into their educator mindsets as they prepared course work and teach. Phenomenological descriptions of the instructors' experiences were provided rather than studies related to training protocols, best practices for implementing the IPP, and/or the outcomes or course work related to infusion of the IPP into teaching pedagogies. Mountain and Nowacek corroborated this finding in their chapter describing the IPP as a Signature Pedagogies for the 21st Century:

To the extent that there is a scholarship of Jesuit teaching and learning, the studies seem to be "visions of the possible" and efforts toward theory building. Scholarly publications from instructors conducting "what is" or "what works" inquiries related to Jesuit goals or methods in their own classrooms are rare.<sup>28</sup>

Brief articles on Ignatian Spirituality can also be found at various Jesuit colleges and universities within their Centers for Teaching and Learning newsletters describing the importance of integrating Ignatian Spirituality into teaching. These centers typically offer faculty development experiential opportunities to explore and learn more about Ignatian Spirituality. For example, in the 2009 CTL Notebook at St. Louis University<sup>29</sup> there are a series of brief narratives authored by faculty teaching in various departments who discuss the range of ways they apply Jesuit Pedagogy in teaching. Only one of 13 narratives specifically discusses the infusion of the five IPP constructs of context, experience, reflection, action, and evaluation into the classroom instruction. The author of that essay suggests a series of questions a teacher could ask herself as

she goes about teaching that directly relates to that author's interpretation of the five constructs.

What is more commonly found in most articles related to infusion of Jesuit pedagogy into teacher praxis is a broad-brush approach using Ignatian Spirituality as the umbrella construct and identifying terms that are related to St. Ignatius and Jesuit education, i.e. cura personalis, Ratio Studiorum, Magis. These articles provide interpretations as to how those terms could come to life in the classroom.<sup>30</sup> The other construct that is widely used in this series of articles in conjunction with Ignatian Spirituality and Jesuit education is reflective practices. Reflective practices, which could be any number of metacognitive thinking practices i.e. prayer, meditation, and/or guided study questions, become synonymous with infusing Ignatian pedagogy into teaching and learning. Perhaps that is because it is the primary metacognitive process used for the Spiritual Exercises from which the ICAJE constructed the IPP.

The authors of the aforementioned articles utilize the IPP to substantiate why they are teaching in a certain fashion or couple the IPP with particular contemporary theories. Two of these articles were published by Marquette University faculty. Chubbuck & Van Hise describe their personal use of the IPP. <sup>31</sup> Both provide definitions of each of the five IPP constructs and how the IPP informed their teaching methods. The IPP is then placed in juxtaposition to contemporary educational theory to substantiate its value as a legitimate pedagogy. These articles do not provide information regarding how the authors came to use the IPP, their training in its use, or how or if they provided their students with explicit information as to how the IPP relates to their Jesuit education or their rationale for using the IPP. "Elements of Ignatian Pedagogy, though not explicitly taught, are also modeled."32 Both authors provide insight as to how the IPP influenced the development and instruction of their courses. Neither directly discusses the IPP with their students so one cannot expect there to be examples of syllabi, assignments, or rubrics where the IPP could be infused to assist the reader in knowing how the IPP could be explicitly utilized by teacher and student in their courses.

In summary, this information regarding what other teachers at Jesuit institutions say about Ignatian Spirituality and/or the IPP, knowing what St. Ignatius intended for teachers at Jesuit institutions, and understanding what the IPP advocates teachers to do in relation to using the five constructs in their teaching methodology was useful to the author. Although these articles do not advocate direct instruction of the IPP, they do reinforce the author's juxtaposition of the IPP with the use of contemporary research. The author goes a step further and explains to the students why she is using the IPP and how it relates to contemporary research and the unique role it plays in their attainment of the Jesuit educational mission and learning outcomes.

## Trainer's biases

The author contends that use of the IPP without faculty development, an understanding of curriculum and pedagogy, instructional strategies, and classroom-based learning activities does not afford the instructor the means to translate a valuable mental model into practice. Consequently, students are not being exposed to the distinctive pedagogy of Jesuit Educational Institutions. The author asks, "Why not make the IPP explicit to the students through direct instruction, assignments, and assessments?"

In a parallel process similar to the one the author wrote about in the first article of this series. Cates and Pennington,<sup>33</sup> two authors on the faculty at Regis University, agree with what the author advocates. That is, the adoption of the IPP as faculty pedagogy and explicit direct instruction of it in the classroom to students. They feel the IPP fits within their respective curricula in their respective colleges of Counseling and Marriage and Family Practice, and Nursing. They each examined the impact of the IPP on faculty trained to adopt it, and student reaction to direct instruction and application of the IPP. Their work demonstrated that the IPP informed the faculty and students of this uniquely Jesuit thinking and learning model, and theorized its use could enhance the use of reflection and perhaps the overall learning process. Each provided descriptions of their distinct faculty training processes wherein they defined the five constructs of the IPP and integrated into their respective instructional practices and student learning

activities. For evaluation purposes, Cates administered a reflection questionnaire to students at the end of their practicum and Pennington a pre-posttest survey instrument to faculty and students to measure the impact the IPP had on teaching and learning. Pennington's attempts to measure the impact of the IPP on faculty are the first that the author has discovered. Each author's datum indicated that most faculty and students responded positively to the use of the IPP as pedagogy and learning activities.

The students' most memorable component of the model was the act of reflection. The majority of student respondents agreed that 1) they understood the model, 2) they liked the model, 3) and the model fit their area of expertise and professional philosophy...The overriding theme for faculty was that they desired more education about how to incorporate the model into their courses.<sup>34</sup>

Like Cates and Pennington, the author argues that the use of the IPP by both teacher and student is what makes a Jesuit university education distinct from a secular university education. That distinction rests on the fact that Ignatian Spirituality is the foundational element of a Jesuit education and, therefore, in the form of the IPP should be directly infused in both the faculty's teaching pedagogy and into their curriculum, teaching strategies, and learning activities so students are aware of this value-added resource and the return on their investment from a Jesuit education. The author believes from anecdotal evidence that direct instruction and application of the IPP facilitates students' acquisition of higherorder thinking skills. This can in turn bring about discernment regarding what teacher and student roles are in service to others. Discernment of their roles in the world in service to others can only occur if students are aware that this is an expected outcome from a Jesuit education.

## Reflection

When the IPP training began, the author had five years of experience using the IPP for her theoretical teaching framework, as well as explicitly informing her students of its relationship to St. Ignatius and Jesuit Education. At the same time, she designed course assignments and rubrics to assess the students' understanding and application of the IPP. Anecdotal evidence over this five years indicated that both her teaching and her relationship with students was improved, as well as students' higher-order thinking skills. The latter was generally evidenced in the students' writing and verbal abilities and in demonstrating higher-order thinking skills, i.e., inference, interpretation, analysis, integration, synthesis, and evaluation in their writing assignments. The author's belief that the IPP should be used as pedagogy was predicated on her knowledge of research indicating there is value in direct instruction of both thinking and learning models and in critical thinking skills to bolster higherorder thinking skills. The author juxtaposed the IPP with contemporary research on direct instruction of critical thinking skills to bolster both practices. Going forward, the trainees will be informed that utilizing the IPP as their pedagogy and making it transparent to students is in line with the literature substantiating the value of utilizing thinking and learning models, as well as providing direct instruction of critical thinking. "Educators should model critical thinking in their own instruction by making their reasoning visible to students."35

*Overarching Research Question:* What type of faculty development is effective for the adoption of the signature Jesuit pedagogy within an undergraduate degree program at a Jesuit University?

Cycle 1: September 2010-May 2011

Research Question: When faculty are trained to adopt the IPP as their teaching pedagogy and directly instruct it to their students what outcomes will they articulate related to their teaching and their students' learning?

# Designing training materials

The IPP was a new pedagogy for the three trainees and lacks evidenced-based research that substantiates its benefit to teacher and/or learner. To inform the training and subsequent study of IPP implementation, this trainer used the anecdotal information from the literature to support adoption of the IPP as faculty pedagogy at U.S. Jesuit colleges and universities. The author's interest to do this Action Research was based on the fact that she did not find studies to support her thesis that direct instruction of the IPP benefits teacher and student. She was interested in discovering that if instructors made students aware that the IPP is the signature Jesuit pedagogy could there be an increased probability that students would more easily achieve the Jesuit Education mission? Could repeated use of the IPP increase critical thinking skills that, in turn, could lead to the skill of discernment in order to understand their roles in the world in service to others? Therefore, the author likens the IPP model to research related to the direct instruction of thinking and learning models that increase student learning. She is using analogous theoretical and evidenced-based studies substantiating the use of:

- Relationship between curriculum and pedagogy
- Best practices in faculty development for teachers using a new pedagogy<sup>36</sup>
- Thinking & learning models to inform pedagogy and praxis<sup>37</sup>
- Direct instruction of critical thinking skills to college students to increase higher order thinking and specific instructional practices that facilitate the acquisition/enhancement of critical thinking skills<sup>38</sup>

# Relationship between curriculum and pedagogy

The author looked to the literature to encourage and support faculty to embrace the integration of a new pedagogy, curriculum, and learning strategies into their teaching. The training included discussions and contemporary research regarding curriculum and pedagogy followed by instructional strategies, learning activities, and assessment tools.

"We all operate from implicit or explicit beliefs and values about education such as the purpose of education (transmissive or transformative), the nature of relationships between teachers and students, and the purpose and methods of assessment. It is important for teachers to recognize that these theories, whether we are able to name them or not, influence our teaching, including our pedagogical approaches, curriculum designs and assessment methods, and what we value as knowledge."<sup>39</sup> Doing so provided the trainees with an understanding of how, why, and what we teach. This was especially useful as CPS traditionally uses adjunct faculty who are expert practitioners in their fields who usually do not possess degrees in education and, therefore, rarely have an opportunity to have this type of conversation with their peers.

#### Curriculum review

The CPS undergraduate curricula are designed to facilitate the students' achievement of both the College's Mission and Learning Outcomes as well as the broader Mission & Learning Outcomes of Marquette University's undergraduate degree program. During the first six months of meeting once per month for the CPS IPP training, the author provided studies that substantiated the necessity for teachers to review the juxtaposition of curriculum and pedagogy.

Thus a teacher who is satisfied with his work is, in some way, weighing the value of his pedagogy to some vision of curriculum, consciously or not... That is to say, unless pedagogical decision-making is random, chaotic, and without purpose, it must emerge from and be evaluated, either implicitly or explicitly, against some vision of curriculum. This understood, it must be concluded that better curriculum theory leads to better pedagogy and thus better teaching, as long as a relationship between those elements is nurtured.<sup>40</sup>

The IPP training team discussed curriculum, that is *what* we teach and specifically our courses. The classes that we teach were selected for IPP infusion because they are required courses within the undergraduate degree program and, therefore, would reach the greatest number of students. Further, we reviewed the courses set forth by our college for students to earn their undergraduate degree. We wanted to more clearly understand how our particular classes fit into the overall curriculum map of courses students were required to take to earn an undergraduate degree. Armed with a better understanding of the College's curricula led us to re-examine what outcomes the College and larger University had in mind for students seeking an undergraduate degree. Then we could examine how the IPP, the signature

pedagogy of Jesuit institutions connected to our College as well as University Learning Outcomes.

To inform her training protocol, the author investigated literature related to effective faculty development in the adoption of new pedagogy and direct instruction of critical thinking skills. These studies pointed out that faculty are reluctant to adopt new pedagogies, alter curriculum, and add new learning activities if they are not provided professional development opportunities. The literature indicates that faculty need support to change this mind -set and learn how to utilize pedagogies that facilitate the direct instruction of higher-order thinking skills. Therefore, the faculty members were both afforded the necessary support by being required to participate in this open-ended training beginning in 2010 and continuing through 2013.

...if institutions are truly committed to achieving the widely professed educational objective of instilling critical thinking skills in students, then they need to actively support and guide faculty in teaching reform efforts. Seminars, workshops, and training sessions should not be a one-time event but rather a regular component of an institution's ongoing professional development program for faculty. The refinement of pedagogical technique should be expected from all those who teach. <sup>41</sup>

**Review of College and University and CPS Mission Statements and Learning Outcomes** It was necessary to remind ourselves of why we teach, what we teach, and how we teach it. The author then started with the Mission and Learning Outcomes of the University and CPS as the foundational element that drives our work in the college. To underscore the significance of these statements the college requires faculty to insert these statements in all CPS instructors' syllabi. The trainer explained to the trainees that she also includes a reflection assignment in all of her courses related to the students' demonstration of understanding what is promised to them when they purchase a Marquette education, and how the IPP is a conduit for the achievement of the mission and learning outcomes via the course work. See Appendices A and B.

It was clear to the training team that both sets of Mission Statements and Learning Outcomes had much in common, particularly with how the transformative nature of a Jesuit education produces ethical leaders with a conscience to affect positive change in their communities. Also notable was how students strive for social justice through the acquisition and application of higherorder thinking and communication skills as well as the knowledge and skills of the content in their major. We agreed to remain cognizant of both sets of Mission Statements & Learning Outcomes as we discussed the use of the IPP to attain them. We theoretically agreed there was a greater probability that students could attain the MU and CPS educational outcomes if both faculty and students were aware of the IPP as the Jesuit method of facilitating the attainment of these ideals. A review of CPS curricula was in order as the next building block component to achieving the MU and CPS Mission and Learning Outcomes.

## Focus on pedagogy

Following the discussion on curricula, Mission, and Learning Outcomes, the author provided pedagogical definitions from contemporary educational theory to illustrate how well the IPP aligns with current pedagogical theories. Examples of these highly theoretical and qualitative definitions included the ICAJE's comments:

It is obvious that a universal curriculum for Jesuit schools or colleges similar to that proposed in the original *Ratio Studiorum* is impossible today. However, it does seem important and consistent with the Jesuit tradition to have a systematically organized pedagogy whose substance and methods promote the explicit vision of the contemporary Jesuit educational mission...What seems more appropriate at a more universal level today is an Ignatian pedagogical paradigm which can help teachers and students to focus their work in a manner that is academically sound and at the same time formative of persons for others. <sup>42</sup>

Contemporary researchers provide a complementary view of pedagogy. Smith says "Pedagogy needs to be explored through the thinking and practice of those educators who look to accompany learners; care for and about them; and bring learning into life. Teaching is just one aspect of their practice...as we acquire knowledge about our students' needs and realize how much more than the standard curriculum is needed, we are inspired to increase our own competence."43 This explanation seemed most aligned with our understanding of the IPP and the significance of the teacher's role in building and sustaining a relationship with the student. The author wanted to underscore the importance of having a clear pedagogical foundation upon which to base our instructional strategies as well as our learning activities. She pointed out that corollaries to the IPP and its focus on the teacher-learner relationship are found in contemporary educational literature. "The components of Ignatian pedagogy parallel many theories of good teaching."44 Adoption of the IPP would forestall what some educators say happens when pedagogy is not fully developed and utilized.

"Few college teachers are aware of the power their teaching can exert on their students because they are more focused on curriculum development than on the use of pedagogy to guide their development and implementation of the curriculum. All teachers need to remember that exposing students to a wellthought- out curriculum is not the same thing as educating them, if educating them means, as I think it does, helping them learn how to integrate the contents of the curriculum into their minds, hearts, and everyday lives.<sup>45</sup>

The training team began to construct instructional strategies, learning activities, and rubrics after three months of IPP training and being exposed to the rationale and related research as to why IPP could legitimately be viewed as the linchpin that anchors teaching methods and learning activities.

# Instructional strategies, learning activities and assessment tools

Now that we had a basic understanding of the relationships among curriculum, pedagogy, Jesuit Educational Mission, and its associated learning outcomes, we moved forward to design or adopt instructional strategies, learning activities, and assessment tools, in that order. The trainer provided analogous scholarly literature that, if extrapolated, indicated adopting the IPP as pedagogy and providing direct instruction of the IPP as a thinking/learning model is tantamount to other contemporary evidenced-based thinking/learning models<sup>46</sup> used to facilitate the acquisition and demonstration of higher order thinking skills. Tsui's data, in her study Faculty Attitudes and the Development of Students' Critical Thinking, indicates "Colleges and Universities that are truly committed to the development of critical thinking need to promote faculty exchange about effective pedagogy, as well as offer incentives that appropriately reward those who strive towards and achieve instructional expertise in helping students to master higher-order thinking ... "47 The incentive the college offered was a \$250.00 honorarium per course taught wherein the IPP was infused.

# Connection between IPP and student acquisition of critical thinking skills

As the IPP training proceeded, it was necessary to clearly provide the corollary between the IPP as a conduit for student acquisition of higher-order thinking skills. The training team began this portion of the training by examining the erroneous belief held by many in higher education that students obtain higher order thinking skills merely by being exposed to undergraduate course work required for the degree.

Critical thinking is viewed as a major teaching goal by faculty (Siegal, 1988). When 2,700 teachers from 33 two- and four-year colleges were asked to identify among a list of choices what they perceived as their primary teaching role, "helping students develop higher-order thinking skills" tied with "teaching students facts and principles" for the highest number of responses; each was selected by 28% of those surveyed (Cross, 1993). Yet, there is evidence that little critical thinking development actually takes place in college classrooms (Barnes, 1983; Braxton & Nordvall, 1985; Paul, Elder, & Bartell, 1997). This discrepancy between what is valued and what is pursued ought to be a perennial concern of practitioners and educational researchers alike.48

Likewise, Lai indicates in her literature review on critical thinking:

Empirical research suggests that people begin developing critical thinking competencies at a very young age. Although adults often exhibit deficient reasoning, in theory all people can be taught to think critically. Instructors are urged to provide explicit instruction in critical thinking, to teach how to transfer to new contexts, and to use cooperative or collaborative learning methods and constructivist approaches that place students at the center of the learning process. In constructing assessments of critical thinking, educators should use open-ended tasks, realworld or "authentic" problem contexts, and illstructured problems that require students to go beyond recalling or restating previously learned information.49

The trainer explained to the IPP trainees that one way to address the admonition that *little* critical thinking development actually takes place in college classrooms is to provide direct instruction of critical thinking skills through the use of thinking models that allow students to process what they are thinking about in relation to their learning and transfer that knowledge across courses. She came to that bias after immersing herself in the evidenced-based literature related to teaching thinking skills by using graphic models to increase higher- order thinking skills. She was particularly influenced by Harvard's *21 Century Learning Project* (see

http://www.youtube.com/watch?v=A7UnupFu]k). She agreed that teachers should be teaching students how to learn for understanding in and outside of the classroom.

It seemed that the ICAJE's article about the IPP titled *The Ignatian Pedagogical Paradigm: A Practical Approach* was written for the College we teach, in as it is guided by the motto, "Theory based and practice driven." A focus on praxis is especially germane in the CPS undergraduate degree program as our students are adult learners and working professionals who expect that classroom content will translate into real-time skills. The author contends that the IPP fits the aforementioned model of teaching for understanding, and learning through a pedagogy that informs teachers how to teach for deeper understanding, including that of specific course content. Use of the IPP also facilitates transfer of knowledge and skills from course to course, as well as cross-curricular integration and synthesis of knowledge and skills. The author asserted that our students should be privy to experiencing the uniqueness of Jesuit education through exposure to Ignatian Spirituality in the form of the IPP since this is what sets a Jesuit education apart from any other college or university. The author contends we can arm students with a powerful thinking and learning tool when the IPP informs the praxis of teachers in a Jesuit institution and when students receive direct instruction how to use the IPP. This process facilitates the real-time application of Ignatian Spirituality to course work and perhaps life beyond the classroom.

# Faculty attitudes, best practices, and instructional strategies when adopting new pedagogies

To begin with, the IPP trainees were apprised of the benefits of adopting the IPP both because it is the hallmark pedagogy of Jesuit education and adoption of it as their pedagogy could enhance their students' critical thinking. Use of the IPP by teacher and student can also facilitate the attainment of the CPS and MU Missions and Learning outcomes. They were prudently curious. The author reviewed the literature that indicated faculty are more likely to provide direct instruction of critical thinking skills if they believe their students are capable of doing work that requires higher order thinking skills.50 Empirical research suggests that students of all intellectual ability levels can benefit from critical thinking instruction. The training protocol was also informed by studies that substantiated how faculty attitudes about their students' critical thinking capabilities influence their willingness to provide learning activities that require using critical thinking skills.

Effective instruction for developing critical thinking skills requires faculty enthusiasm for teaching and it typically calls for additional efforts from those who teach. Successful cultivation of critical thinking skills in students is a challenging and often daunting enterprise that demands creativity and experimentation. <sup>51</sup>

The author and trainees presumed the majority of our students possess at least basic critical thinking skills. We also agreed that we have had students who do not appear to come into the classroom with strong critical thinking skills. Teaching those students can be more challenging, as they require different instructional strategies, as well as additional academic support. Overall, the training team believed in our students' potential, and although we are considered veteran teachers, we were still quite enthusiastic about teaching. The consensus was that direct instruction and application of critical thinking skills was in the best interest of all students. We appeared to possess the requisite beliefs in the learning capacity of our students and still felt impassioned in our roles as teachers. We were ready to move forward with reconstruction of syllabi, instructional strategies, learning activities, and assessment tools.

## Providing direction, support, templates

Unless faculty see a benefit, they may be reluctant about changing their curriculum, including syllabi with new content, instructional strategies, learning activities and/or assessment tools. Their reluctance diminishes when they receive faculty development where collegial support is available and are provided templates or examples of how to reconstruct their existing academic materials.<sup>52</sup> The author also referred to studies on the teaching methods that are most effective in bringing about increased higher-order thinking skills.

## Direct instruction of critical thinking skills

When faculty provide direct instruction of critical thinking skills imbedded in the course content along with specific types of assignments acquisition and demonstration of higher-order thinking skills is increased.

These findings make it clear that improvement in students' CT skills and dispositions cannot be a matter of implicit expectation. As important as the development of CT skills is considered to be, educators must take steps to make CT objectives explicit in courses and also to include them in both pre-service and inservice training and faculty development.<sup>53</sup>

Furthermore, the literature identifies three different types of teaching methods that facilitate

students' acquisition of critical thinking skills, i.e., the immersion model of stand-alone critical thinking courses, the infusion model of integrating critical thinking instruction into course curriculum, and the mixed model, which is shown to be most effective. "...the mixed approach combines elements of both the general and subject-specific approaches. Teachers pair standalone instruction in general critical thinking principles with application of critical thinking skills in the context of specific subject matter."<sup>54</sup>

## **Instructional Strategies**

Therefore, the mixed model was adopted by the author, which is what the ICAJE recommends as well.

The pedagogical paradigm proposed here involves a particular style and process of teaching. It calls for infusion of approaches to value learning and growth within existing curricula rather than adding courses. We believe that such an approach is preferable both because it is more realistic in light of already crowded curricula in most educational institutions, and because this approach has been found to be more effective in helping learners to interiorize and act upon the Ignatian values set out in *The Characteristics of Jesuit Education.*<sup>55</sup>

She suggested instruction and assignments specifically on the IPP including assigning the ICAJE IPP document as a reading assignment, along with an article by Facione<sup>56</sup> defining critical thinking skills. The author provided templates for assignments that required students to demonstrate critical thinking and assisted in the construction of a rubric to assess the development of critical thinking skills. The author then followed other researchers' recommendations about how to facilitate this portion of the faculty development focusing on instructional strategies. Studies suggest modifications to existing teaching techniques are more readily adopted if they are not radically different from what teachers are already doing. The author and trainees discussed at length the types of teaching methods they were already using that could be enhanced by the additional instructional strategies being recommended.

Faculty are not more actively engaged in fostering critical thinking in students, because many view it as being time-consuming and risky (Haas & Keeley, 1998). Hence, widespread efforts to heighten students' critical thinking through instructional change is more likely to come about if they involve altering commonplace teaching techniques rather than radically replacing them. <sup>57</sup>

#### Learning activities

Tsui's<sup>58</sup> study indicates critical thinking is fostered when writing intensive courses are present across the curriculum, when class discussions encourage divergent points of view, and where instructor and peers asked challenging questions. Additionally, evidence-based recommendations are found in the literature on how to do direct instruction of critical thinking.

Educators are urged to use open-ended problem types and to consider learning activities and assessment tasks that make use of authentic, real-world problem contexts. In addition, critical thinking assessments should use ill-structured problems that require students to go beyond recalling or restating learned information and also require students to manipulate the information in new or novel contexts. Stimulus materials should attempt to embed contradictions or inconsistencies that are likely to activate critical thinking.<sup>59</sup>

Other researchers indicate that explicit instruction, collaborative or cooperative learning, modeling, and constructivist techniques encourage critical thinking skills. Tsang's study corroborates the collaborative learning approach and specifies inclass reflective group discussions in addition to individual student reflective writing assignments.

Reflective group discussion offers different benefits to student learning compared to individual reflective writing, in particular, collaborative multi-perspective learning and professional development through a supportive "community of practice" engaging in critical dialogue. By engaging in critical reflective dialogue, students and instructors become collaborators in reflective interrogation, imaginative speculation, perspective transformation and in the creation of the kind of knowledge that empowers change within themselves and their social domains.<sup>60</sup>

Likewise the authors of the IPP concur:

The reflection envisioned can and should be broadened wherever appropriate to enable students and teachers to share their reflections and thereby have the opportunity to grow together. Shared reflection can reinforce, challenge, encourage reconsideration, and ultimately give greater assurance that the action to be taken (individual or corporate) is more comprehensive and consistent with what it means to be a person for others.<sup>61</sup>

Consequently, the author explored with the trainees what instructional strategies and learning activities they were already using. All four of us were using a variety of similar methods to instruct our students including direct instruction, class discussion, and written reflection assignments that may require rewriting, group assignments, asking broader-deeper questions. The author and the trainees were intentional and deliberate about promoting higher-order thinking skills in their courses. This was accomplished by providing feedback verbally and in writing, scaffolding course content so students had the opportunity to integrate and synthesize course content, and brainbased learning techniques. All but one of us (the research and statistical methods instructor) described their courses as writing intensive, but his experience as a philosophy teacher allowed him to include IPP reflective writing assignments in his math course. It appeared that as a group we were already incorporating evidence-based instructional strategies that promoted critical thinking skills.

The author provided anecdotal evidence from her own students' feedback to compliment the literature. Several students indicated that the use of the IPP was an effective teaching pedagogy and a thinking model for their use to practice integrating it with course work and outside the classroom.

The Reflective Thinking methods, particularly the IPP, have given solid framework to a process that I have previously used but without a valid means to measure my progress. The conversations and emails from you have helped me with real time application and understanding of using this framework. I know that this is indeed learning on my part as coming into the course I felt as though I was pretty decent at reflection and have always kept a journal - now I can literally go back over the past 3 weeks, sit down with pen/ paper and go through the steps of the IPP and the conversations I have had and see what it is I am doing in print not just in my mind haphazardly as in the past. [Student course work]<sup>62</sup>

Anecdotal evidence would not be enough, however, to substantiate the benefits of infusing the IPP into our pedagogies and to provide direct instruction of the IPP. We would have to design an assessment tool or rubric to determine its impact on students' mastery of using IPP in conjunction with course content and determining if it does increase their critical thinking skills.

# Assessing use of the IPP and students' critical thinking skills

We began with a discussion of the need to construct a rubric to measure our students' application of the IPP to their course work, and assess the students' critical thinking skills. This was a new endeavor for the three trainees and not one they embraced with enthusiasm. One trainee's initial reason for not wanting to construct and use a rubric was because it seemed to him the only purpose was a defense against grade conflicts. The other two trainees were not sure if it was a useful or beneficial task because the assessment process can be nebulous, ephemeral, and subjective, dependent upon the metacognition of faculty who use it without standardization from student to student. After another robust discussion, all were on board once it was explained that rubrics are tools to facilitate the students' mastery of course content. The ICAJE suggested criterion upon which to measure the impact of the teacher's use of the IPP on students, "A teacher who is observant will perceive indications of growth or lack of growth in class discussions, students' generosity in response to common needs, etc. much more frequently."<sup>63</sup> The author sought to incorporate these two criterions along with more operationalized criteria for assessment than the ICAJE provided. The author also provided examples and templates from her own courses. (See Appendix B.)

## Assessing students' critical thinking skills

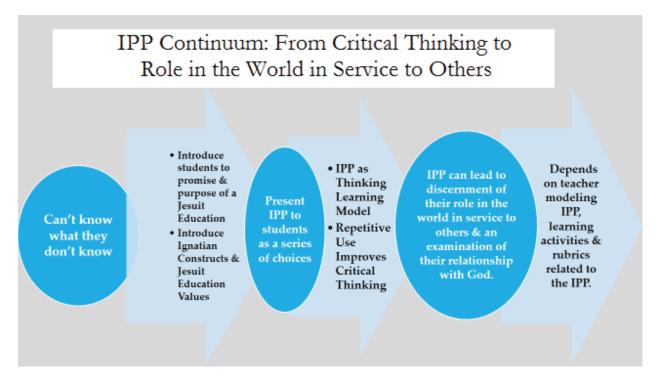
As though asking the trainees to adopt a new pedagogy and infuse it into their course work and altering their curriculum to include direct instruction of critical thinking skills weren't enough, the author was now asking the trainees to assess their students' use of the IPP and its influence on their critical thinking skills. Measuring any metacognitive activity is difficult at best. Fortunately, the literature is abundant with research on various assessment tools that measure portions of critical thinking skills. Published assessment tools available to measure critical thinking skills on the post-secondary level are numerous and include the California Critical Thinking Skills Test (Facione, 1990), the Cornell Critical Thinking Tests (Ennis & Millman, 2005), the Ennis-Weir Critical Thinking Essay Test (Ennis & Weir, 1985), Thinker's Guide (Paul & Elder, 2006), the Watson-Glaser Critical Thinking Appraisal (Watson & Glaser, 1980) and twelve more thinking assessment measures recommended by the US Department of Education in Bessick.64 The author followed the recommendations of the researchers cited in Bessick's literature review on

critical thinking to facilitate the construction of the rubric. "To assess critical thinking there needs to a clear goal; a definition of critical thinking skills, and use of various evidence-based measures of critical thinking."<sup>65</sup>

#### Goal

The initial goal (albeit lofty) for our assessment was to determine if the use of the IPP facilitated an increase in students' critical thinking, which, in turn, would increase the probability that the students could become proficient at discernment. At one end of the spectrum of learning, the author suggests that the IPP can be thought of as a thinking/learning model to enhance the students' critical thinking skills. However, once students have sharpened their critical thinking skills the author believes that they would be more capable of keenly selective judgment, also known as discernment (See Figure 4.)

According to St. Ignatius and the ICAJE, discernment is the ultimate higher-order thinking skill Jesuit education should be imparting to its students.



#### Figure 4

For Ignatius, to 'discern' was to clarify his internal motivation, the reasons behind his judgments, to probe the causes and implications of what he experienced, to weigh possible options and evaluate them in the light of their likely consequences, to discover what best leads to the desired goal: to be a free person who seeks, finds, and carries out the will of God in each situation and could thereby learn to *discern* their role in the world by service to others.<sup>66</sup>

# Definition

The second criterion when measuring critical thinking is a definition. Hence, the author chose Facione's definition:

As to the cognitive skills here is what the experts include as being at the very core of critical thinking: interpretation, analysis, evaluation, inference, explanation, and self-regulation...The experts were persuaded that critical thinking is a pervasive and purposeful human phenomenon...Critical thinking goes way beyond the classroom.<sup>67</sup>

#### Evidence-based measures of critical thinking

To guide the development of an adequate rubric, the author took into account literature on evidence-based measures of critical thinking. Guntin states, "A literature review indicates that there may be three performance indicators to evaluate critical thinking: (1) higher-order questions (Renaud and Murray, 2007), (2) deep reflection (Moon, 2009), and (3) addressing spirituality and the "big questions" (Walvoord, 2008.)" <sup>68</sup> These performance indicators are a very close match to what the ICAJE predicted would occur when teachers use the IPP to guide their instruction as all three indicators can be found in various places throughout the document:

What is needed is a framework of inquiry for the process of wrestling with significant issues and complex values of life, and teachers capable and willing to guide that inquiry...A critically important note of the Ignatian paradigm is the introduction of reflection as an essential dynamic...REFLECTION wherein students are impelled to consider the human meaning and significance of what they study and to integrate that meaning as responsible learners who grow as persons of competence, conscience and compassion.<sup>69</sup>

Based on those three indicators, the training team went through the process of constructing individual rubrics for each of our courses that included application of the IPP and demonstration of critical thinking skills. We constructed the rubrics based on the goal, definition of critical thinking, and evidence-based measures of critical thinking. (See Appendix B.)

## Focus change from students to faculty

For nine months the training team immersed ourselves in the reasoning for adopting the IPP, reviewed educational theory and research about the benefits of connecting curriculum and pedagogy, designed instructional strategies, learning activities, and rubrics based on parallel contemporary research about direct instruction of critical thinking skills. The trainees would be implementing these items in their courses from fall 2011 to spring 2012. The training team made significant progress during the first academic year of IPP training and at that point were still focused on measuring the impact of the IPP on our students through our teaching and learning activities. We were on the verge of designing a pre-posttest instrument with questions modeled after the five constructs of the IPP and that was going to be given to students. The surveys were to capture their subjective evaluation of their experience/practice of being exposed to and using the IPP. This became the most difficult task to date.

As the author reflected on this task and compared it to the other challenges we overcame during the past nine months, it seemed that the process of assessing the impact of the IPP on students was premature. The three trainees had not even begun to teach the IPP as their pedagogy or integrate all the IPP-related instructional and learning activities into their curricula. The trainees needed that experience to build confidence and skills before they could assess how the IPP was impacting student learning. We decided it was much more logical to first assess our own use of the IPP and its influence on our pedagogical instructional strategies and learning activities before we could measure the impact of the IPP on our students. Nonetheless, the foundation we had laid thus far

would serve us just as well, now that the focus was on the instructor. Table 1 indicates the factors considered when the author assessed the trainees' commitment to the IPP training and implementation process. During Cycle 2, we would construct a questionnaire to collect data related to the influence the IPP had on our teaching.

# Quantitative measures

Measuring the trainees commitment in quantitative terms included attendance, compliance in providing written documentation of a revised syllabus, instructional strategies and earning activities related to the IPP and critical thinking, and rubrics assessing student mastery of the IPP in relation to course content. These measures include on average 60% attendance rate at 9 monthly training meetings. On average one trainee was unable to attend each meeting as the trainees are adjunct instructors and their ability to attend all meetings was subject to the schedules at their full-time jobs. However, if absent they were brought up to date on content covered via email summary of the meeting and fulfilled assignments. There was 100% compliance with:

• Revising syllabi that included the documentation of the required reading and

writing assignments related to the IPP and Critical Thinking

- Providing a written description of the trainees' lessons including direct instruction of the IPP, critical thinking, and the relationship of both to Mission and Learning Outcomes of CPS and MU
- Documenting the three assignments connecting the IPP to course content

Constructing a custom-designed rubric that provided the students a guide for how to demonstrate understanding and application of the IPP process in their thinking and writing within course content assignments

# Qualitative measures

• In order to measure the trainees' compliance with the training requirements, the author assessed if the trainees adopted the IPP as their pedagogy, completed tasks during and between training sections, and participated in collaborative discussion on pedagogy, instructional strategies, learning activities and rubrics. She also used the seven criterions found in Kinzie's 2005<sup>70</sup>

| Quantitative Indicators  | Cycle 1<br>Sept. 2010-April 2011  | Qualitative Indicators   | Cycle 1<br>Sept. 2010-April 2011 |
|--|---|--|----------------------------------|
| Attendance   | 60 % *<br>(1 X month for 9<br>months)<br>*On average 1 trainee<br>missed 1 meeting over<br>the training session | Adoption of IPP  | 100%<br>(3 trainees)             |
| Placed reading<br>assignments in syllabi                       | 100%<br>(IPP and Facione =2)  | Completing tasks during<br>and between training<br>sections                                  | 90%<br>(2 or 3 trainees)         |
| Constructed writing<br>assignments and placed<br>in in syllabi | 100%<br>(3 assignments over 8<br>weeks)   | Collaborative discussion<br>on pedagogy,<br>instructional strategies,<br>learning activities | 100%<br>(3 of 3 trainees)        |
| Constructed rubrics and placed in in syllabi                   | 100%<br>(1 per 3 assignments)   |  |                                  |

**Table 1** Factors used to evaluate the trainees' commitment to the IPP training and implementation process during Cycle 1: September2010 through April of 2011

study of 20 four-year colleges and universities that indicate there are certain qualities faculty demonstrate that lead to higher than usual graduation rates and desirable learning outcomes. "Faculty members who take risks with their teaching, experiment with innovative pedagogical approaches, and make teaching and learning a collaborative activity are more likely to foster student success."71 These criterions are used to provide evidence of the trainees' broader commitment to promoting student success through participation in the IPP faculty development and through their adoption of the IPP as their teaching pedagogy. Those criteria certainly match with what the IPP calls teachers to do in relation to their students.

During the nine months of the initial stage of IPP training, the three trainees definitely met or exceeded all of the aforementioned seven qualitative measures that foster student success. First and foremost, participation in the lengthy and ongoing IPP training demonstrates how the trainees embraced undergraduates and their learning. Through our nine months of dialogue on their pedagogical, curricular and instructional strategies it was evident that the trainees met criterion 2 by setting high expectations for students' performance by infusing the IPP into their curricula and the related challenging reflective assignments. They also met criterion 3 by constructing rubrics that serve to guide students' mastery of course content so students know what they have to do to succeed. They clearly meet criterion 4 as they were engaged in the adoption of a pedagogy that required modifying their existing curriculum and instructional practices. Involvement in the adoption and implementation of the IPP required instructors to build on students' knowledge, abilities, and talents specifically when they use the three IPP constructs of Context, Experience, and Reflection, thus meeting criterion 5. Criterion 6 and criterion 8 were met because the IPP required the instructor to provide the student with meaningful feedback and make time for students to both strengthen the teacher-learner relationship and nurture student learning. The trainees met criterion 7 by "weaving diverse assignments into curriculum," i.e., direct instruction of the IPP and connecting it to the mission and vision of MU Jesuit education, use of guided reflection

assignments that directly connected the IPP to course content, etc. Infusion of the IPP into the trainees' pedagogy and instructional practices met Criterion 9 because the whole purpose of the IPP is to construct a reciprocal learning process between teacher and student. By adopting the IPP, the trainees exhibited the behaviors Kinzie says are necessary to foster student success (See Table 2).

# Reflecting back on the first cycle

I began the IPP training with the lofty ambitions of imparting the tenets of the IPP, along with concomitant instructional strategies, learning activities, and rubrics to my trainees and asking them to measure the influence of their direct instruction of the IPP on their students' critical thinking skills. You might ask, "What was I thinking?" My passion for all things IPP was fueled by five years of using the IPP for my theoretical teaching framework, as well as explicitly informing my students of its relationship to St. Ignatius and Jesuit education. This anecdotally indicated that my teaching and the teacher-learner relationship improved. Moreover, I observed that my students' higher-order thinking skills were enhanced.

The latter was generally demonstrated by the students' growth in critical thinking skills revealed in their writing and verbal abilities, as defined by Facione, 72 i.e., interpretation, analysis, integration, synthesis, and evaluation. My teaching pedagogy was inalterably changed from being the expert who had high expectations and little patience for those students who weren't performing well, to becoming a student centered instructor, tremendously invested in the teacher-learner relationship as the means for facilitating thinking and learning. As a result of my adherence to the IPP teacher obligations, I became much more service oriented and willing to work with a student to make sure he/she was learning. As I model what I am called to do according to the IPP, and I truly see my teaching role as an opportunity to shape the students' thinking, learning, and behaving within and outside the classroom in the spirit of St. Ignatius.

Sharing my passion and enthusiasm of my perceived benefits from adopting the IPP as my

#### Table 2 ICAJE IPP & Kinzie Success Indicators for Student Learning

| KINZIE INDICATORS  | IPP INDICATORS  | IPP TRAINEES MEET KINZIE'S<br>INDICATORS  |
|--|---|---|
| 1. Kinzie: Embrace undergraduates and their learning.  | 1. "We call this document <i>Ignatian Pedagogy</i> since it is intended not only for formal   | First and foremost, participation in the lengthy and<br>ongoing IPP training demonstrates how the trainees  |
| 2. Kinzie: Set and maintain high expectations  | education provided in Jesuit schools, Colleges<br>and Universities"p. 3<br>2. "What is called for is a framework of   | embrace undergraduates and their learning.<br>Through our seven months of dialogue on our   |
| for student performance.   | inquiry in which the process of wrestling with<br>big issues and complex values is made fully<br>legitimate." p.36  | pedagogical, curricular and instructional strategies it<br>is evident that the trainees met criterion 2 by setting<br>high expectations for students' performance based on<br>mastery of content and increase in critical thinking<br>skills.   |
| 3. Kinzie: Clarify what students need to do to succeed.  | 3. "Students experience a lesson clearly<br>presented and thoroughly explained and the<br>teacher calls for subsequent action on the part<br>of students" p.11  | They also met criterion 3 by constructing rubrics that<br>serve to guide students' mastery of course content so<br>students know what they have to do to succeed.   |
| 4. Kinzie: Use engaging pedagogical approaches appropriate for course objectives and students' abilities and learning styles.  | 4. IPP: "Thus concern for scope and<br>sequence became prominent according to the<br>abilities of each learner." p.38   | They clearly meet criterion 4 as they are engaged in<br>the adoption of a pedagogy that required modifying<br>their existing curriculum and instructional practices.  |
| 5. Kinzie: Build on students' knowledge, abilities and talents.  | 5. "teachers first need to know their<br>students. It recommends that the masters<br>study their pupils at length and reflect upon<br>their aptitudes, their defects and the<br>implications of their classroom behavior."<br>p.36  | Involvement in the adoption and implementation of<br>the IPP requires instructors to builds on students'<br>knowledge, abilities, and talents specifically when<br>they use the three IPP constructs of Context,<br>Experience, and Reflection thus meeting criterion 5.  |
| 6. Kinzie: Provide meaningful feedback to<br>students and 8. Kinzie: Make time for students<br>" Ignatius never lost sight of the individual<br>human person. He knew that God gives<br>different gifts to each of us. One of the<br>overriding principles of Jesuit pedagogy derives<br>directly from this, namely, <i>alumnorum cura</i><br><i>personalis</i> , a genuine love and personal care for<br>each of our students." p. 36 | 6. and 8 IPP: "The teacher can stimulate<br>needed reconsideration by judicious<br>questioning, proposing additional<br>perspectives, supplying needed information<br>and suggesting ways to view matters from<br>other points of view. p. 20   | Criterion 6, as well as criterion 8 are met because the<br>IPP requires the instructor to provide the student<br>with meaningful feedback and make time for<br>students to both strengthen the teacher-learner<br>relationship and insure student learning.   |
| 7. Kinzie: Weave diversity into the curriculum including out-of-class assignments.   | 7. IPP " this document aims to move a<br>major step ahead by introducing Ignatian<br>Pedagogy through understanding and practice<br>of methods that are appropriate to achieve<br>the goals of Jesuit education. This paper,<br>therefore, must be accompanied by practical<br>staff development programs which enable<br>teachers to learn and to be comfortable with a<br>structure for teaching and learning the<br>Ignatian Pedagogical Paradigm and specific<br>methods to facilitate its use." p. 4 | The trainees met criterion 7 by "weaving diverse<br>assignments into curriculum," i.e., direct instruction<br>of the IPP and connecting it to the mission and<br>vision of MU Jesuit Education, use of guided<br>reflection assignments that directly connect the IPP<br>to course content, etc.  |
| 9. Kinzie: Hold students accountable for taking<br>their share of the responsibility for their<br>learning.  | 9. IPP: "It gives teachers additional means of<br>encouraging student initiative. It allows<br>teachers to expect more of students, to call<br>upon them to take greater responsibility for<br>and be more active in their own learning."<br>p.21   | The trainces easily met Criterion 9 as the whole<br>purpose of the IPP is to construct a reciprocal<br>learning process between teacher and student. By<br>adopting the IPP, the trainces are certainly exhibiting<br>the behaviors Kinzie says are necessary to foster<br>student success, i.e., "taking risks with their teaching,<br>experimenting with innovative pedagogical<br>approaches, and making teaching and learning a<br>collaborative activity" Kinzie p.1 |

International Commission of the Apostolate of Jesuit Education (ICAJE), "Ignatian Pedagogy: A Practical Approach" (Rome: International Center for Jesuit Education, 1993), i, http://www.rockhurst.edu/media/filer\_private/uploads/ignatian\_pedagogy\_a\_practical\_approach.pdf.\_\_p.34

Kinzie, J. (2005). Promoting student success: What faculty members can do (Occasional Paper No. 6). Bloomington, Indiana: Indiana University Center for Postsecondary Research. http://www.bridgew.edu/Teachingandlearning/pdf/DEEP%20Practice%20Brief%206%20What%20Faculty%20Members%20Can%20Do%20rev.pdf

#### Mc Avoy: Training Faculty

#### Factors That Reinforced Adoption and Implementation of IPP

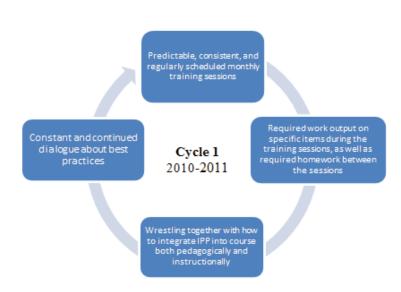


Figure 5 Cycle 1: Sept. 2010-April 2011

pedagogy to both my students and colleagues clouded my ability to assess the pace with which to move my colleagues forward as they undertook this enormous task. In reality, they had accomplished much in a very short period of time. This was evidenced by their attendance, compliance with reconstructing and modifying curriculum, instructional strategies, learning activities, and rubrics. I am not sure I would do anything different, as I uncertain we would have discovered the need to focus on ourselves as instructors otherwise. Cycle 2 from May 2011 through May 2012 would have been the timeframe within which to implement all that was designed in Cycle 1. By now, focusing on the trainees' experiences as they adopted and integrated the IPP into their course work, we could assess how it impacted the teacher's teaching and indirectly the learners' learning.

The *Ignatian Pedagogy Project* is addressed in the first instance to teachers. For it is especially in their daily interaction with students in the learning process that the goals and objectives of Jesuit education can be realized. How a teacher relates to students, how a teacher conceives of learning, how a teacher engages students in the quest for truth, what a teacher expects of students, a teacher's own integrity

and ideals --all of these have significant formative effects upon student growth. Father Kolvenbach takes note of the fact that 'Ignatius appears to place teachers' personal example ahead of learning as an apostolic means to help students grow in values.'<sup>73</sup>

#### Cycle 2: May 2011-May 2012

As the trainees adopted the IPP as their teaching pedagogy and provided explicit instruction about the IPP to their students, how will it influence the trainees' thinking and behaving related to the teacher-learner relationship and indirectly to student learning?

#### Construction of data collection instrument

In May 2011 the training team continued the IPP training and focused on the task of designing a data collection instrument with questions directly related to the five constructs of the IPP. We were fortunate to have the assistance of one of our colleagues<sup>74</sup> who teaches in the college and is also a researcher and evaluator at a local college. She assisted us in the design and construction of the questions. The training team decided that the instrument should contain the five qualitative constructs of the IPP with related questions to determine how each construct within the IPP

impacted our teaching. (See Appendix C.) That data collection instrument was constructed and put into use in September 2011. To keep us focused on the IPP as our pedagogy, the training team agreed (trainer as well) to input the data at the end of each eight week course we taught. We also agreed to keep reflection notes during the course to remind us of our experiences with using the IPP. Each of us taught at least one of the required courses from May 2011-August 2012, for a total of 4 classes.

#### **Cautious implementation**

The trainees took a cautious approach introducing the IPP to their courses and to their students. It was one thing for them to use the IPP as a theoretical framework but it was another to make it an explicit part of their curriculum and instruction. Because they were only somewhat more familiar with the IPP than their students, they purposely and understandably treaded lightly with how much they expected their students to absorb and be able to apply the IPP within their assignments. Two of the trainees, who are both theologians, were particularly hesitant to be too fervent about presenting the IPP as the signature Jesuit Pedagogy, in part because they likened the direct instruction of the IPP to imposing Catholic doctrine on their students. They also felt it was somewhat of an infringement on their academic freedom. The other trainee had concerns mainly having to do with how to effectively infuse this highly qualitative process into his highly quantitative research and statistical methods classes. He predicted that the students would far prefer to complete written reflective IPP assignments than put forth the effort to complete math problems. He did infuse the assignments into his math courses, and, as he predicted, the students did far prefer to do the IPP assignments than the research and statistical methods assignments.

# Integrating and mastering a new pedagogy with related assignments

The trainees' primary focus during this cycle was on how to teach the IPP with a modicum of confidence to promote their students' learning of it. Each of the trainees complied with assigning the required IPP reading and writing assignments, completing the direct instruction of the IPP, and connecting it to the critical thinking article, and constructed and/or fine-tuned student assignments to promote utilization of the IPP related to their particular course content. They reported students were interested and curious about the IPP as a uniquely Jesuit Pedagogy. The trainees received positive student feedback about the inclusion of the IPP in their course work during and at the end of courses. The trainees thought there could be some connection between the introduction of the IPP and the students' demonstration of higher-order thinking skills. It was difficult to measure because all three of the trainees taught for that outcome prior to the introduction of the IPP in their courses.

Instructional strategies and learning activities were based on aforementioned evidence-based studies that recommended writing intensive assignments incorporating reflective thinking and journaling, opportunities for robust class discussion, and instructors asking the "big questions" related to philosophy, theology, ethics, and math, requiring one to use higher order thinking skills. The discourses about students' positive response to the IPP naturally lead the author to facilitate conversation and reflection on how the IPP was influencing their teaching. The trainees readily acknowledged that the adoption of the IPP promoted the intentional use of self-monitoring of their instructional strategies so as to as closely adhere to the IPP "call" to build the teacherlearner relationship.

# **Reinforcing experiences**

In the spring of 2011, Associate Dean Cleveland invited the training group to present their IPP work-to-date at the Association of Jesuit Colleges and Universities and Deans of Adult Continuing Education (AJCU-DACE). The conference took place in October 2011 and provided the author and trainees an opportunity to articulate exactly what and how they were using the IPP to deans and associate deans from Jesuit schools across the United States. The preparation allowed us to examine and reflect on our work to date. The author believes this reflection strengthened the trainees' commitment to the IPP.

The exchange of information at the conference exposed strong interest on the part of AJCU

deans and associate deans to adopt the IPP as the signature Jesuit Pedagogy at their schools. Presenting at the conference also provided the author and trainees with unexpected recognition for sharing our way of using the IPP and translating it into actionable terms so that others could replicate it. One trainee explained to the ACJU audience:

"As an educator, there is not only a certain zeal for the disciplines that is taught, there too is an enthusiasm for teaching these topics to others sharing with them the nuances and splendors which therein lie. The opportunity to learn, improve, and enhance my pedagogy was (and still remains) a thrilling proposition, one which the IPP certainly did not disappoint. How refreshing to be introduced to a schema that well addresses and directs my prior abstruse sentiments of education which failed to find flight thru a semester."<sup>75</sup>

Most of all, our collegiality and camaraderie were enhanced as a result of the value we were told we provided. In fact, two deans approached the author and asked her to provide consultation on the IPP process, which she did, and she has been invited to do on-going consultation with the Regis' Ignatian Scholars program from January 2011 to present. Another experience that provided evidence of how the college valued our work with the IPP took place in the spring of 2012 when Associate Dean Cleveland hosted a recognition dinner for the IPP training group. This, too, impressed upon us that we were doing important work that was highly valued.



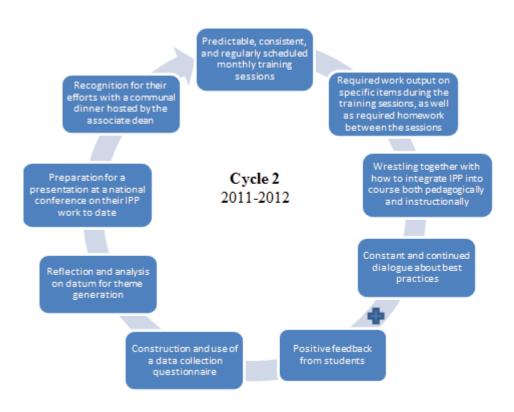


Figure 6 Cycle 2: May 2011-May 2012

# December 2011-May 2012

My fellow colleagues conscientiously introduced the five aspects of Ignatian Pedagogy namely, context, experience, reflection, action, and evaluation to their students. Over the course of the 2011-2012 academic years, the author noticed that the discourse among the trainees about using the IPP became much more self-directed and relaxed compared to the first cycle of our training. She believes this is a result of the routine, predictable monthly training meetings with the singular focus being the influence the IPP had on our teaching.

# Quantitative data

Attendance: 60% attendance of all three trainees at eight of nine (9) training sessions between September 2011 and May 2012, placed reading assignments in syllabi, constructed IPP writing assignments and placed in syllabi, constructed rubrics and faculty data collection questionnaire, courses taught, number of students, and honorarium received.

**Table 3** Evidence used to evaluate the trainees continued commitment to their professional development and student learning during the 2011 and 2012 academic years

|   | Cycle<br>May 2011–M   |  |                           |
|---|---|--|---------------------------|
| Quantitativ   | e Indicators  | Qualitative I  | ndicators                 |
| Attendance  | 60%*<br>(1 X month for 11<br>months) *On average 1<br>trainee missed 1 meeting<br>over the training session | Adoption of IPP  | 100%<br>(3 trainees)      |
| Placed reading<br>assignments in<br>syllabi                 | 100%<br>(IPP and Facione=2)   | Completing tasks<br>during and between<br>training sections  | 90%<br>(2 or 3 trainees)  |
| Constructed writing<br>assignments and<br>placed in syllabi | 100%<br>(3 assignments over 8<br>weeks)   | Collaborative<br>discussion on<br>pedagogy,<br>instructional<br>strategies, learning<br>activities | 100%<br>(3 of 3 trainees) |
| Constructed rubrics<br>and placed in syllabi                | 100%<br>(1 per 3 assignments)   | Preparation and<br>Presenting at AJCU-<br>DACE Conference  | 100%<br>(3 of 3 trainees) |
| Constructed data<br>collection<br>questionnaire             | 100%<br>(3 instructors design<br>questionnaire)   | Inputting data and analyzing data  | 100%<br>(3 of 3 trainees) |
| Courses taught  | 5   |  |                           |
| Number of students  | 41  |  |                           |
| Honorarium  | 100%<br>(3 trainees<br>compensated)   |  |                           |

Table 4 IPP Data Collection Questionnaire

| IDD Data Callestian Organizations:  | Santambar 2011 through March 2012  |
|---|--|
| IPP Data Collection Questions:<br>CONTEXT QUESTIONS:  | September 2011 through March 2012  |
| (C1) What have I done to create<br>an environment and opportunity<br>to effectively employ IPP in<br>the classroom in a manner that<br>facilitates student learning?  | <b>Context:</b> Directly instructing the IPP provided more deliberate intentional opportunities in and outside of the classroom for reflection opportunities for both student and teacher.   |
| (C2) Has a deliberate focus on the IPP changed my teaching in terms of substance and style?   |  |
| EXPERIENCE QUESTIONS:<br>(E1) What have I done to create an environment<br>and opportunity (ies) to effectively employ IPP in the<br>classroom in a manner that facilitates student<br>learning?  | <b>Experience:</b> The deliberate, intentional use of the IPP brought about a parallel process whereby the student examines what they are thinking and learning, and at the same time the instructor is examining their own learning and acquisition of new knowledge through the adoption of the IPP. |
| (E2) What past experiences have impacted my attitudes and capacities for teaching?  |  |
| REFLECTION QUESTIONS:<br>(R1) What have I done to develop my instructional<br>approach to better understand the needs of students?  | <b>Reflection:</b> Adopting the IPP as their pedagogy generated an "I-Thou", i.e., <i>we are in the learning relationship together for the duration</i> ' between teacher and student and, promotes, a continuous assessment of what the teacher is teaching to ensure                                 |
| (R2) How have the students' responses given me an indication of my success in imparting IPP principles and practices?   | the students are learning.   |
| ACTION QUESTIONS:<br>(A1) What actions have I taken to improve my<br>teaching, not only for this course, but for all courses<br>taught as a result of using the IPP?  | <b>Action:</b> Teacher is more willing to extend themselves in new ways to students, i.e., extend offers of assistance more frequently and for longer periods of time, deliberately and intentionally assess what the student needs to facilitate academic success.                                    |
| (A2) How have I created opportunities for the student for the continuous interplay of experience, reflection, action?   |  |
| EVALUATION QUESTIONS:<br>(E1) What metrics are being used to discern the<br>growth of the student and myself as a result of being<br>exposed to the IPP (i.e., cognitive, relational,<br>emotional, service to others, direct feedback from<br>students, or)? | <b>Evaluation:</b> Adoption and use of IPP as thinking and learning model facilitates ongoing assessment of the learning process but is not to be considered 'full-blown' immersion into Ignatian Spirituality.  |
| (E2) How have my behaviors inside and outside of<br>the classroom changed as a result of integrating the<br>IPP into my course?   |  |
| (E3) If I have grown from using the IPP, how has<br>that that growth occurred in one or more of the<br>following areas: a thinking strategy, discernment,<br>service to others, spirituality and/or other?  |  |

# Qualitative Data

**Compliance with instructional practices & learning activities:** 100% of all trainees continued compliance of the adoption and implementation of IPP during at least one course taught by each trainee as evidenced by continued adoption of IPP as pedagogy, completing tasks during and between training sections, collaborative discussion on pedagogy, instructional strategies, learning activities, preparation and presentation at AJCU-DACE Conference, inputting data and analyzing data from IPP questionnaire.

## **Data Analysis**

A review of the data was done by the author and presented to the trainees in March 2012. Each of the trainees provided datum collected at the end of each course they taught from September 2011 through March 2012. The author reduced using Bazely's<sup>76</sup> iterative process. The first iteration divided the data into manageable chunks that were coded. Categories were produced in the second iteration through the meaning and insights derived from words and acts of the participants in the first iteration. The categories of the second iteration were then interpreted to produce themes, which comprised the third and final iteration of the data. The author did this analysis by herself in order to then explain to the trainees how this is done. However, the trainees reviewed the analysis and provided their own ideas on it, as well.

## The themes

**Context:** Direct instruction of the IPP provided more deliberate intentional opportunities in and outside of the classroom for reflection opportunities for both student and teacher. **Experience:** The deliberate, intentional use of the IPP brought about a parallel process whereby the student examined what they were thinking and learning, and at the same time the instructor examined their own learning and acquisition of new knowledge through the adoption of the IPP. **Reflection:** Adoption of the IPP as their pedagogy generated an "I-Thou" relationship between teacher and student, i.e., 'we are in the learning relationship together for the duration' promoted a continuous assessment of what the teacher was teaching to insure the students were learning.

Action: Teachers were more willing to extend themself in new ways to students, i.e., extend offers of assistance more frequently and for longer periods of time, and to deliberately and intentionally assess what the student needed to facilitate academic success.

**Evaluation:** Adoption and use of IPP as thinking and learning model facilitated ongoing assessment of the learning process, but was not to be confused with full-blown immersion into The training team felt the themes derived from the data analysis were a substantive foundation to build on in the coming academic year. Following the reporting out of the theme generation, the questions were fine-tuned in the data collection instrument based on a review of what each of us thought the questions were asking. We reached consensus on how best to make them uniformly understandable. We wanted to continue collecting data to provide evidence that adoption of the IPP benefits a Jesuit university teacher. After revising the questionnaire, the training team agreed to continue using it throughout the 2012-2013 academic year.

# Reflecting on Cycle 2

This cycle produced processes and outcomes that could be replicated by others who want to provide formal IPP instruction to their Jesuit faculty. A conflagration of mutually reinforcing activities bolstered the IPP training and promoted its adoption as the trainees' pedagogy and facilitated adjustments to their curricular, instructional, and assessment activities. These activities included:

- Attending predictable, consistent, and regularly scheduled monthly training sessions
- Wrestling with how to integrate IPP into course both pedagogically and instructionally
- Completing required work on specific items during the training sessions, as well required homework in between the sessions
- Sharing examples of instructional strategies, which brought about constant and continued dialogue about best practices

- Constructing and using a data collection questionnaire
- Reflecting on and analyzing of datum for theme generation
- Preparing for and presenting at a national conference on their IPP work to date and receiving valuable affirming feedback
- Receiving recognition for their efforts with a communal dinner hosted by the associate dean

What this author believes promoted the successful adoption and implementation of the IPP training is being focused on one construct (the IPP) with related practice and application-oriented teaching and learning activities. Other activities that facilitated success were requirements to produce tangible teaching and learning products related to the implementation of the IPP. Providing opportunities for collegial discussions and receiving positive reinforcement in the form of public recognition at the national conference and a communal dinner hosted by the associate dean were also indications of success.

Furthermore, a qualitative data analysis of datum collected during the courses each trainee taught over the academic 2011-2012 school year indicated that their adoption of the IPP promoted their intentional, reflexive use of reflection to selfmonitor and self-assess their teaching methods, so as alter curriculum and instruction and meet the learning needs of their students. Those activities ultimately strengthened the teacher-learner relationship. The author did not orchestrate all of these activities but can assure the reader she will do so going forward when she replicates the training for the next group of trainees. The positive reinforcement the trainees received from applying what they were learning with students in the classroom, participating in the ongoing longterm training process providing the trainees with sounding boards and collegial support, presenting what they had accomplished to an extremely interested high-caliber audience, receiving recognition and affirmation for their work, and conducting action research propelled the trainees to continue their high-quality IPP work.

From being novice IPP students during Cycle 1 to becoming beginner implementers during Cycle 2, Cycle 3 provided the trainees with the opportunity to become proficient IPP implementers. The very next activity we undertook at the start of Cycle 3 that seemed to propel the trainees toward becoming proficient IPP implementers was for each of them to write a portion of an article for a national publication about their IPP work to date. They also continued to participate in regularly scheduled IPP training sessions, and to implement and evaluate the IPP.

# Cycle 3: May 2012-May 2013

*Research Question:* While faculty adopts the IPP as their pedagogy and integrates it into their curricular and instructional practices, as well as continues to participate in action research about it, how will these activities impact their teaching, relationships with students, and attitudes about being a Jesuit educator?

# Article for publication

At the beginning of Cycle 3 in May 2012 the trainees and trainer set about the business of writing an article for publication in the Regis University's Jesuit Higher Education: an online journal (JHE.) This was precipitated by feedback from Marie Friedemann, Associate Dean of the College for Professional Studies at Regis University, following our presentation at the American Jesuit College and University Deans of Adult Continuing Education or AJCU DACE conference in fall 2011, described earlier in Cycle 2 information.

## Publication fuels continued practice

The author believes that writing, editing and proofreading a section of the article strengthened each trainee's commitment and dedication to all things IPP. That writing and reviewing process provided ample opportunity to reflect on our collective work, and our individual progress in adopting and applying the IPP. The article was published in October 2012 and the positive feedback we received from this publication fueled our continuing work. Another indirect reinforcement that endorsed our continuing IPP work was that the author was asked to consult with the Marquette School of Nursing Curriculum Committee. They were interested in knowing how they, too, could infuse the IPP into their respective areas of work.

We were recharged and buoyed by the outcomes related to the publication of the article and ready to continue using the IPP to guide our instruction, as well as to continue to gather and analyze datum. We had promised the editors at Regis that we would complete Part 2 of the first article and provide the results of our data analysis. We also intended to provide a description of protocol for formal IPP faculty training so other Jesuit faculty could replicate it. Our data collection and analysis would provide evidence that if the training and implementation guide were followed, then the adoption and implementation of the signature Jesuit Pedagogy prescribed by the ICAJE and predicated on Ignatian Spirituality was far more likely to occur. And we also hoped to report evidence that being trained to employ the IPP as our pedagogy along with related curricular

activities benefits both the instructor's teaching and learning and also fosters student learning.

# Factors that reinforced adoption and implementation of IPP

Building on the faculty development activities from Cycles 1 and 2, in addition to the newly acquired skills in teaching the IPP, the trainees again became involved in activities during Cycle 3 that reinforced their continued commitment to the IPP. These activities included analysis of the longitudinal IPP datum we collected from 2011 to present, designing the IPP faculty development process to train other CPS faculty beginning in fall of 2013 through spring of 2014, and reviewing the second article for publication that reported the results of our action research.

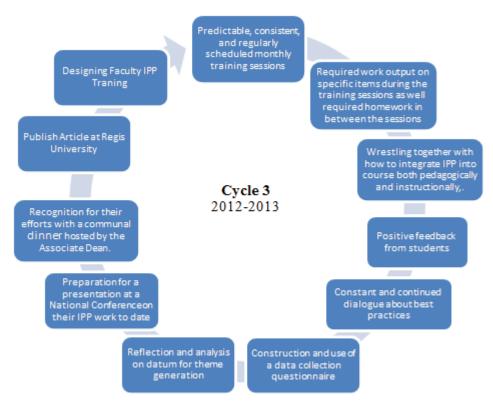


Figure 7 Cycle 3: September 2012- May 2013

# Evidence used to evaluate actions

# Quantitative data analysis

The quantitative data used to assess the trainees' continued commitment to their professional development and student learning during Cycle 3 beginning in May 2012 and continuing to May 2013 included:

- All three trainees and the author attended 100% of 10 training sessions
- All three trainees and the author taught at least one course during the 2012-13 academic years where the IPP was implemented to a total of 38 students
- All three trainees and the author continued with 100% compliance with the adoption and implementation of the IPP as evidenced through discussions at the training sessions regarding how they were continuing to integrate the IPP into curriculum, instruction, and assessment activities and also by completing the data collection questionnaire
- All three trainees and the author provided reflective narratives for the article published in the Jesuit Higher Education: an online journal at Regis University in Denver, CO
- All three trainees and the author participated in rigorous data analysis of data collected from 2011-2013
- All three trainees read and edited the content of the present article prior to its being submitted to the editor

# Qualitative data analysis

All three trainees and the author were strongly involved in the qualitative data analysis of the longitudinal data collected from fall of 2011 to May of 2013. We utilized traditional qualitative data analysis techniques following Bazely's77 iterative process. As was the case in the Cycle 2 data analysis, this process generated three iterations. The first iteration divided the data into manageable chunks that were coded. Patterns and regularities were identified, and in turn, appropriate categories were devised. The clustering of such categories generated themes from which conclusions were drawn. Data was then coded by categories and subjected to further review. Following a refining process, similar or related categories were "clustered" into themes

from which conclusions were drawn. The categories of the second iteration were then interpreted to produce themes that comprised the third and final iteration of the data. In addition, "member checking" was utilized within interviews and with key informants (the IPP trainees and the associate dean of the College) to confirm validity of recorded data and tentative interpretations.

To stimulate critical self-reflection in the interpretative research process, we documented and openly discussed verbally and in writing, procedures, methods, hunches, and approaches to analysis for subsequent review. We reviewed each other's work to look for divergent views to challenge generalizations. The author constructed a flow chart that depicted the movement each of us followed, from codes to categories to themes. This large chart displayed categories of interest accompanied by corresponding selections of supporting narrative such as key phrases and quotations identified by all four of us. Verification procedures were undertaken by triangulating data from various sources of information and for the refinement of interpretations and solidification of findings. My colleagues are adjunct instructors who devoted much time and energy to this process outside of their other employment. Much credit is given to the trainees for the rigor, time, and conscientious effort they applied to the completion of this process (See Table 5).

# Trainee theme analysis: Themes: Patterns and trends within and across datum, Terence Crowe, Ph.D.

**Context:** All seem to "own" their own past and bring all types of life experiences to learning community. There is also awareness that IPP must be introduced and developed very deliberately and with respect to the validity of others' life stories.

**Experience:** The specifics and tone varies, but all seem to be emphasizing the importance of growth and maturation, both in their own lives, and, by extension, to their students and fellow educators, as well. IPP is not just an individuated encounter with a learning method that is more open to the imaginative world of the other person.

Table 5 Cycle 3 September 2012–May 2013

| Quantitativ   | e Indicators   | Qualitative Ir   | ndicators                 |
|---|--|--|---------------------------|
| Attendance  | 60%*<br>(1 X month for 9<br>months) *On average 1<br>trainee missed 1 meeting<br>over the training session | Adoption of IPP  | 100%<br>(3 trainees)      |
| Reading assignments placed in syllabus                      | 100 %<br>(IPP and Facione)   | Completing tasks during<br>and between training<br>sections                                  | 90%<br>(2 or 3 trainees)  |
| Constructed writing<br>assignments and placed in<br>syllabi | 100%<br>(3 assignments over 8<br>weeks)  | Collaborative discussion<br>on pedagogy,<br>instructional strategies,<br>learning activities | 100%<br>(3 of 3 trainees) |
| Constructed rubrics and placed in syllabi                   | 100%<br>(1 per assignment)   | Inputting data and analyzing data  | 100%<br>(3 of 3 trainees) |
| Continued to utilized data collection questionnaire         | 100%<br>( All 3 trainees inputted<br>data into questionnaire)  | Reviewed 2 <sup>nd</sup> article<br>for publication  | 90%<br>(2 of 3 trainees)  |
| Courses taught  | 5  |  |                           |
| Number of students  | 38   |  |                           |
| Honorarium  | 100%<br>(4) 1 trainer and 3<br>trainees compensated)   |  |                           |

Compassion is an important theme, explicitly or implicitly for all.

**Reflection:** With the emphasis on increased selfknowledge comes a corresponding increase on responsibility to one's personal growth, as well as to the community one is identified with. There is a more balanced understanding of both privilege and responsibility as learners and teachers mature into an IPP approach.

Action: IPP offers diverse, self-examining ways that encourage various forms of enlightened activism, which can be internal, external, or both.

**Evaluation**: The potential exists for a kind of integral humanism, recognizing the worth of the

whole person. This is not merely a topic for speculation although that, too, has its worth.

## Theme Analysis, Robert Lotz, Ed.D

The IPP's effect on the instructor in terms of *vision-alteration* (seeing things through the eyes of the students and consciously becoming valuecentered in writing assignments) and *method enhancement* (always using qualitative and quantitative evaluation of student work, as well as adjusting and modifying course content through analysis of student growth and questioning) was clearly affirmed through the self-analysis and reflection processes used throughout the study. In reviewing the analysis of categories and meaning units (cf. data chart), the differences and similarities become evident for each course and instructor. All trainees were compelled to continue the use of the IPP in course development and execution, though for reasons as diverse as selfenrichment and integrity in the role of instructor to the realization of the IPP as an informal point of reference having value inside and outside the classroom to developing a method toward discipleship. The personal value and positive synthetic dimension of the IPP for learning were described by several students in most courses through their reflective assignments and in their course evaluations.

# Major Themes:

1) All three trainees and the author experienced an internalization of the intended use of a new pedagogy, the IPP prescribed by the International Commission of the Apostolate of Jesuit Education (ICAJE) and became strongly committed to its contmued use.

2) All three trainees and the author articulated benefits from adoption of the IPP as their teaching pedagogy specifically related to the five IPP constructs:

#### Subthemes:

Context Questions:

(C1) What have I done to create an environment and opportunity(ies) to effectively employ IPP in the classroom in a manner that facilitates student learning?

(C2) Has a deliberate focus on the IPP changed my teaching in terms of substance and style?

Direct instruction of the IPP provoked the intentional inquiry into the trainees' as well as our students' predispositions, prejudices, and past experiences regarding teaching and learning related to course content in each course we taught, which promoted reflective thinking and elucidated barriers to learning.

Experience Questions: (E1) What have I done to create an environment and opportunity(ies) to effectively employ IPP in the classroom in a manner that facilitates student learning? Direct instruction of IPP constructs aided course design and student comprehension of both IPP and course material.

(E2) What past experiences have impacted my attitudes and capacities for teaching? Trainees' and trainer's past histories demonstrate a penchant for critical thinking and supportive instruction. Compassionate growth and maturation are emphasized through all facets of their lives.

## **Reflection Questions:**

# (R1) What have I done to develop my instructional approach to better understand the needs of students?

Enhanced the teacher-learner relationship as a result of the mandate set forth in the IPP for teachers to cognitively and effectively assist students to discern the meaning of course content in a deeper, broader, more complex manner.

## (R2) How have the students' responses given me an indication of my success in imparting IPP principles and practices?

Use of reflective practices increased as a result of direct instruction and integration of the IPP course content and assignments, and, therefore, students' critical thinking skills were demonstrated by a greater propensity to interpret, analyze, evaluate, infer, explain, and substantiate with outside sources.

## **ACTION QUESTIONS:**

(A1) What actions have I taken to improve my teaching, not only for this course, but for all courses taught as a result of using the IPP? The trainees and the author became dedicated to building and maintaining the student teacher relationship to both facilitate learning within and beyond the course being taught to them.

# (A2) How have I created opportunities for the student for the continuous interplay of experience, reflection, action?

The trainees' and the author's instructional methods included the five IPP constructs in at least three assignments, and the students' written reflections provided illumination as to their understanding and utilization of same across these assignments. **Evaluation Questions:** 

(E1) What metrics are being used to discern the growth of the student and myself as a result of being exposed to the IPP (i.e., cognitive, relational, emotional, service to others, direct feedback from students or...)? Students' acquisition and mastery of the five constructs of the IPP was measured through rubrics with metrics to assess their demonstration of its use in discussions, assignments, and by student testimonials, and through observing the students' willingness to facilitate their own and their classmates' intellectual growth by serving each other. The trainees' and the author's growth from exposure to the IPP was measured quantitatively through attendance at training sessions, by compliance in the construction and implementation of IPP-related assignments and rubrics. Qualitative measures indicate strong identification with the IPP, and trusting and reciprocal relationships developed over the course of the training, assisting each other with, and building a community of practice.

# (E2) How have my behaviors inside and outside of the classroom changed as a result of integrating the IPP into my course?

The trainees and the author developed and demonstrated a deeper commitment to serving their students wherever possible as a result of the IPP-driven call to develop and maintain a strong teacher-student relationship. Outside the classroom, the trainees and this author acquired the capital notion of personal growth and service to others by assisting each other throughout the training and espousing its benefits to the AJCU-DACE, a national group of Jesuit Deans of Adult & Continuing Education and in a previously published article.

# (E3) If I have grown from using the IPP, how has that that growth occurred in one or more of the following areas: a thinking strategy, discernment, service to others, spirituality, and/or other?

The trainees and the author indicate that adherence to the teacher responsibilities identified within the IPP, as well as compliance with the IPP training requirements, fueled the implementation of new instructional strategies. In addition, those activities brought about the cognizance of St. Ignatius, chief architect of Jesuit education and the unique role Ignatian Spirituality in the form of the IPP plays in fostering their own and their students' learning. The use of the IPP provided the opportunity to discern their roles in the world in service to others; for example, a willingness to provide IPP training to other faculty and interest in the personal examination and/or nurturance of their spirituality through participation in formal Ignatian Spirituality exercises (See Table 6).

# Reflection

My thoughts, after collecting and analyzing the data in the third cycle of our action research, are that I am in awe of my colleagues' willingness and ability to stay committed and do the work related to their IPP training. Because of their professionalism and willingness to follow my lead, we accomplished an enormous amount of work, as evidenced by the publication of this article.

What worked best, I believe, is that we built on and continued with a steady and predictable training schedule with task descriptions provided and time lines at each training session and reminders sent following and prior to the next training session. While two of the three trainee instructors have their Ph.Ds. and the third nearing completion of same, none of them had done formal educational action research prior to this two year and nine month training process. I would more thoroughly explain this process throughout the study/training to improve on the research process. What surprised and pleased me most me about what occurred during Cycle 3 is that all of us significantly benefited both personally and professionally from adopting the IPP as our pedagogy. It is difficult to recognize these benefits while you are in the midst of participating in longterm IPP training, adopting and implementing a new pedagogy and related instructional practices, assessing your own and your students' use of the IPP, collecting and analyzing data, and deciphering outcomes. I am totally impressed with our accomplishments.

# Summary reflection on 2010-2013 training experience

Looking back at the data collection and data analysis process, I am impressed by the growth I observed in myself and the trainees. Participation

Table 6 Comparison of Themes Cycles 1, 2, and 3

| IPP Data Collection Questions:  | Major Themes:  | Major Themes: May 2011 – May 2013  |
|---|--|--|
|   | September 2011 – March 2012  | <ol> <li>All 3 trainees and the trainer experienced an internalization of the intended use of a new pedagogy, the IDP prescribed by the International<br/>Commission of the Apostolate of Jesuit Education (ICAJE) and became strongly committed to its continued use.</li> </ol>  |
|   |  | <ol> <li>All 3 trainees and the trainer articulated benefits from adoption of the IPP as their teaching pedagogy specifically related to the five IPP constructs.</li> </ol>   |
|   |  | Sub Themes:  |
| CONTEXT QUESTIONS:<br>(CI) What have I done to create<br>an environment and opportunity<br>due lassroom in a manner that<br>fastlikhts student hearning?  | Context: Directly instructing the IPP provided<br>more deliberate immethical apportunities in and<br>outside of the classroom for reflection<br>opportunities for both student and teacher.  | (CI) & (C2) Direct instruction of IPP constructs aided course design and student comprehension of both and IPP and course material.  |
| (C2) Has a deliberate focus on the IPP changed<br>my teaching in terms of substance & style?  |  |  |
| EXPERIENCE OURSTICTONS:<br>(E1) What have I done to create an environment<br>and opportunity (ne) to effectively employ 1129 in<br>the classroom in a maanser that facilitates student<br>hearning?<br>(E2) What past experiences have impacted my<br>attitudes and capacities for teaching?  | <i>Experiments</i> : The delivers, intentional use of<br>the DP brought shout a parallel process<br>whereby the student examines what they are<br>initiabling and learning and at the same time the<br>instructor is examining their own learning and<br>acquisition of new knowledge through the<br>adoption of the DP. | (E1) Direct instruction of IPP constructs aided course design and student comprehension of both and IPP and course material.<br>(E2) Trainees' and trainer's part histories demonstrate a penchant for critical thinking and supportive instruction. Compassionate growth and<br>maturation are emphasized through all facets of their lives.  |
| REFL ECTION QUESTIONS<br>(1) What have I done to develop my<br>instructional approach to better understand the<br>needs of students?<br>(R2) How have the students' responses given me<br>principles and practices?<br>principles and practices?  | Reflection: Adopting the IPP as their<br>becageory generated an inf-Thou's defationship<br>between teacher and student and promotes a<br>continuous assessment of what the teacher is<br>teaching to insure the students' are learning.  | (R1) Enhanced the teacher-learner relationship as a result of the mandate set forth in the IPP for teachers to cognitively and affectively assist ender the maximum of course content in a desper, broader, more complex maximes. (R2) Use of reflective practice increased as a result of factor instruction and integration of the IPP course content and assignments and therefore, students' oritical thinking skills were demonstrated by a greater propensity to integret, analyze, evaluate, infer, explain, and ubstantiase with outside sources.  |
| ACTION QUESTIONS<br>ACTION QUESTIONS<br>feaching, not only for this course, butfor all<br>course thoght as a result of using the IPP?<br>(A2) How have I created opportunities for the<br>indent for the continuous interplay of<br>experience, reflection, action?   | Action. Teacher is more willing to extend  | (A1) The trainees' and trainer became dedicated to building and maintaining the student-teacher relationship to both facilitate learning within and beyond the course being taught to them. (A2) The trainees' and trainer's instructional methods included the 5 IPP constructs in at least 3 assignments and the students' written reflections provided illumination as to their understanding and utilization of same across these assignments.   |
| EVALUATION QUESTIONS<br>EVALUATION QUESTIONS<br>growth of the students, are being used to discern the<br>growth of the student & myself as a result of<br>being exposed to the IPP (i.e. cognitive,<br>being exposed to the IPP (i.e. cognitive,<br>freeback from students ort)?<br>(E2) How have my behaviors inside & outside of<br>the Lasroon dhanged as a result of integrating<br>the IPP into my course? | Evaluation: Adopting and using of IPP as a,<br>highlighting and learning model facilitates on-<br>going assessment of learning process but is not<br>full-blown Ignetian Spirituality.   | (E1) Students' acquisition and mastery of the 5 constructs of the IPP was measured through rubcics with metrics to assess their demonstration of its use in discussions, assignments, and student restinontials and by observing the students' willingness to facilitate their own and their its use in discussions, assignments, and student restinontials and by observing the students' willingness to facilitate their own and their through attendance at training easilons, by compliance in the trainees' and traines' second and the attendance at training easilons, by compliance in the construction and implementation of IPP related assignments and their with and their strong identification with the IPP and the trusting and reciprocal relationships developed over the course of the training, assisting each other with and building a community of practice.   |
| (2.3) If I have grown from using the IPP, how<br>has that that growth occurred in one or more of<br>the following areas a thinking strategy,<br>discerament, service to others, spirituality and/or<br>other?   |  | Purely the manage of the properties of the properties of the properties of the capital of the capital products of the capital properties of the capital properties of the capital properties of the capital provide and maintain as attorned the capital provide the capital provide and second growth and second and the capital provide and second growth and second and the capital provide and second growth and second and the capital provide and second growth and seco |
|   |  | (E3) Adherence to teacher responsibilities identified within the IPP as well as compliance with the IPP training requirements fueled the implementation of new introtional strategies for trainess and trainer, brought about the cognizance of St. Ignatinu, chief architect of Jeant induction. He unique role [gapting Sprittuality in the form of the IPP plays to foster their won and their students' learning as well as discoming their role in the world in service to other it. PP training to other faculty and interest in the personal association, and/or     |

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# Mc Avoy: Training Faculty

#### Figure 8 Factors that Reinforced Adoption and Implementation of IPP



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in this two year and nine month IPP training process, adoption and implementation of the IPP into one's pedagogy and curriculum is an arduous task in and of itself. This is made even more onerous when one is an adjunct instructor and has another full-time job elsewhere. What made all of this possible was top-down support of the training process. The fact that the author had been an adjunct instructor in the College for five years and then became its first full-time faculty member increased the probability of success that this training would bring about successful pedagogical and instructional change.

The author understood the dynamics of the College's context for faculty and students taught in the college for five years and used the IPP in her courses during those five years. She provided articles, templates for assignments, rubrics to the trainees, assisted in the construction of the data collection instrument, and required the trainees to do data collection and analysis. In addition, factors that I believe influenced the trainees' continuous commitment to the IPP training and the successful outcomes outlined in this article were a number of external reinforcements, e.g., presenting their IPP work to date at the National AJCE-DADE conference in October 2011, a recognition dinner in March 2012 sponsored by the associate dean, contributing to the original IPP article and subsequent publication in fall 2012, along with positive feedback from the college administrators and faculty, and contributions to the submission of the second article during Cycle 3 of this study.

Most importantly, though, is the fact that the three trainee adjunct instructors were highly collaborative and trusting individuals, who despite having strong reservations initially about being told they were required to adopt and integrate the IPP into their pedagogies and instructional practices, attested to receiving benefits from doing so.

Initially, what the author hypothesized was that the students' higher-order thinking skills would increase if long-term IPP training was provided to faculty to provide direct instruction of the IPP along with concomitant instructional strategies, student learning activities, and assessment instruments to their students. However, during the first cycle of this study it became apparent that first and foremost, the trainee instructors needed to become immersed in the IPP as their pedagogical framework in order for the students to benefit from it.

#### Major outcomes

As a result of this focus change from student to teacher, the IPP did become the seminal pedagogy for the trainees, and, as a result, allowed them to instruct their students about this uniquely Jesuit thinking/learning model. Therefore, both teachers and students benefited from the IPP training process, thus enabling both groups to be more likely to achieve the mission and learning outcomes of a Jesuit education.

Other training outcomes included:

- A deeper understanding of St. Ignatius, the founder of the Jesuit order and his intent for Jesuit education;
- Clarity about the importance of basing curriculum and instruction on a strong pedagogical framework;
- Commitment to the practical application of the IPP as well as the broader aims of its adoption per the ICAJE, e.g.,
  - Teacher's resolute commitment to building strong teacher-student relationships to further student learning
  - Teacher's solemn responsibility for the facilitation of student learning, teacher's awareness he/she is the model of Ignatian Spirituality in the form of the IPP
  - Teacher's abiding commitment to serving students and others
  - Teacher's newly inspired curiosity to examine their spirituality via formal faculty development opportunities for Ignatian Spirituality

#### Recommendations for IPP training protocol

- Demonstrate strong administrative support for IPP training by requiring faculty to participate in long-term faculty development (2-3 years) and pay an honorarium.
- Pilot the IPP training with a small group of trainees who are open to new teaching

methods, are capable, and preferably enjoy debating, challenging, adapting, and supporting their colleagues. Those qualities appear to facilitate the training process if the trainees already employ instructional strategies that the literature identifies are necessary for direct instruction of critical thinking skills, as well as an inclination to improve teaching through faculty development.

- IPP trainer should:
  - Be comfortable with resistance and able to resolve conflict and reach consensus while at the same time forging ahead with the IPP training and implementation activities
  - Have hands-on experience with IPP as pedagogy and instructional strategy, and be able to provide transparent evidence of this
  - Exhibit genuine enthusiasm and be committed to the IPP as his/her pedagogy instructional strategy, and demonstrate proficiency in its use for credibility and legitimacy
  - Provide trainees with analogous evidencedbased studies that substantiate use of the IPP as an effective thinking and learning model
  - Illustrate how to adopt and integrate the IPP into curriculum, pedagogy, and instructional strategies and learning activities through templates of same already constructed and then require trainees to design same for their courses
  - Assign homework tasks during and between sessions to reinforce practice using the IPP
  - Require trainees to incorporate visible evidence that they are adopting and integrating the IPP into syllabi, instructional strategies, learning assignments, and rubrics, and to discuss their IPP practices regularly and openly at training sessions
  - Design and implement a study that the trainees are thoroughly involved to examine the training process and its outcomes while the training is occurring, i.e., construct data collection instrument to collect their own data over the long-term training from their courses, analyze data collected both on their own and by their fellow trainees; write a summary of their findings
  - Seek and/or create opportunities that will reinforce the trainees' commitment to

adopting and integrating the IPP into their curriculum, i.e., a public presentation on their experience learning about, adopting, and instructing the IPP; writing an article for publication on the training process

- Advocate for the trainees to be recognized for their contributions publically, i.e., stating what they are doing at faculty meetings and listing them as co-contributors in the articles for publication; using them as exemplars to others outside of the college, who are interested in adopting the IPP and privately honorarium and recognition dinners
- Express and demonstrate genuine professional respect and regard for the hard work the trainees undertake during the training and implementation efforts

## Limitations

This study involved a small sample of trainees and thus cannot predict how the training protocol could impact a larger faculty group. Effective training of faculty about the IPP as pedagogy and its application in the classroom may be contingent on a trainer who has extensive real time experience utilizing the IPP as both a pedagogy and instructional practice. This type of faculty development is most effective when it is at least 2-3 years long, which is oftentimes difficult to accomplish unless the leadership of the college requires participation in this type of training. External influences that reinforced the trainee instructors' commitment to adopting the IPP may be difficult to replicate, i.e. presenting at a major national conference on this topic, seeing their contributions to an earlier article published.

## Next steps

The IPP trainer and trainees will be offering IPP training to the rest of the College faculty during the 2013-2014 academic school years. As was the case for this study, data collection will be done by trainees using the same data collection instrument to determine the impact the IPP has on their instruction. Following the faculty training, we plan to design a process and/or utilize an existing instrument to assess the influence the IPP has on students' critical thinking skills and to determine if there is an increased predilection on their parts to discern, serve, and examine their spirituality after being taught and utilizing the IPP.

#### Notes

<sup>1</sup> International Commission of the Apostolate of Jesuit Education (ICAJE), "Ignatian Pedagogy: A Practical Approach," Rome: International Center for Jesuit Education. 1993, i,

http://www.rockhurst.edu/media/filer\_private/uploads/igna tian\_pedagogy\_a\_practical\_approach.pdf.

<sup>2</sup> Pat Bazely, "Analyzing Qualitative Data: More Than Identifying Themes," *Qualitative Research* 2, no. 2 (2009).

<sup>3</sup> Margaret Riel, "Understanding Action Research," accessed June 6, 2010, <u>http://cadres.pepperdine.edu/ccar/define.html</u>.

<sup>4</sup> Rebecca Nowacek and Susan Mountin, "Reflection in Action. A Signature Ignation Pedagogy for the 21st Century," In *Exploring More Signature Pedagogies. Approaches to Teaching Disciplinary Habits of the Mind.*, A. Haynie and R. Gerung, ed., N. Chick (Sterling: Stylus Publishing LLC, 2012) 129-142.

<sup>5</sup> Association of Jesuit Colleges and Universities (AJCU), "The Jesuit, Catholic Mission of U.S. Colleges and Universities," September 2012, <u>http://www.ajcunet.edu/Assets/Publications/File/The</u> Jesuit Catholic Mission of Jesuit Colleges and Universities PDF.pdf.

<sup>6</sup> St. Louis University, "Spiritual Journeys: Ratio Studiorum," accessed September 2012, http://libraries.slu.edu/a/digital\_collections/spiritual-journeys/ratio.html.

7 AJCU, "The Jesuit, Catholic Mission."

<sup>8</sup> Ibid.

9 ICAJE, "Ignatian Pedagogy," i.

<sup>10</sup> Ibid.

<sup>11</sup> St. Louis University, "Ignatian Pedagogy Overview," accessed October 1, 2012, http://www.slu.edu/cttl/resources/ignatian-pedagogy.

<sup>12</sup> ICAJE, "Ignatian Pedagogy," i.

13 AJCU, "The Jesuit, Catholic Mission."

14 Ibid., 26.

<sup>15</sup> ICAJE, "Ignatian Pedagogy," i.

<sup>16</sup> Michael Sheeran, S.J. and Jim Stoeger, S.J., to Maureen Mc Avoy May 14, 2013.

<sup>17</sup> Christopher Hayes, "Dissertation Paradoxes, Parallels, and Pedagogy. A Case Study of Ignatian Pedagogy and of Teachers' Perceptions of its Implementation in Australian Jesuit Schools," (Ph.D. Dissertation, Australian Catholic University Fitzroy, 2006).

<sup>18</sup> See "Ignatian Pedagogy Lesson Plans," accessed July 22, 2013, http://www.docstoc.com/docs/5216218/Ignatian-Pedagogical-Paradigm-Lesson-Plans-Lesson-Title-Discipline-Contributor; St. Aloysius College, "The Ignatian Pedagogy Paradigm," accessed July 22, 2013, http://www.staloysius.nsw.edu.au/jesuits/ipp/noteworthy.as p; Joan Van Hise and Dawn Massey, "Applying the Ignatian Pedagogical Paradigm to the Creation of an Accounting Ethics Course," Journal of Business Ethics, 2010, http://digitalcommons.fairfield.edu/businessfacultypubs/15/; Tips for New Teachers at RJHS, "Profile of an Ignatian Educator," accessed July 22, 2013. http://tipsfornewteachersatrihs.wikispaces.com/Profile of an Ignatian Educator; The CTL Notebook, no. 4, accessed July 22, 2013, http://www.slu.edu/Documents/cttl/theNotebook-11 4.pdf; Loyola University, "Ignatian Pedagogy: Tips from Loyola Faculty," last modified October 24, 2011, http://www.youtube.com/watch?v=uRegpaVY0WI; Nowacek and Mountin, "Reflection in Action."

<sup>19</sup> Carolyn Lausch, Jesuit Secondary Education Association, "A Priviledged Moment.Teachers & Learners Walking the Way of Ignatius," last modified 2002, accessed July 22, 2013, http://eduignaciana.tripod.com/docum/CELReflections.pdf.

<sup>20</sup> Riel, "Understanding Action Research."

<sup>21</sup> See M. Daudlin, "Learning from Experience Through Reflection," Organizational Dynamics. (Winter 1996): 36-48.; J. Edwards, and D. Rigano, "Incorporating Reflection in the Work Practice." Management Learning. (1998): 431-436.; P. Ertmer, and T. Newby, "The Expert Learner: Strategic, Self-Regulated, and Reflective," Instructional Science. (1996): 1-24.; D. Perkins, Outsmarting I. Q., The Emerging Science of Learnable Intelligence (New York: The Free Press, 1995); D. Perkins, Making Learning Whole (San Francisco: Jossey-Bass, 2009).

<sup>22</sup> ICAJE, "Ignatian Pedagogy," i.

<sup>23</sup> Ibid., 6.

<sup>24</sup> Cutting Edge Series #1: Achieving the Dream, "Engaging Adjunct and Full-Time Faculty in Student Success Innovation," last modified August 6, 2010, <u>http://www.achievingthedream.org/resources/cutting\_edge\_series.</u>

<sup>25</sup> Communities of Practice: "The Organizational Frontier," *Harvard Business School Working Knowledge Archive*, February 22, 2000, <u>http://hbswk.hbs.edu/archive/1317.html</u>.

<sup>26</sup> Ibid.

<sup>27</sup> Emily Lai, "Critical Thinking: A Literature Review Research Report," p.33, accessed June 15, 2011. http://pearsonassessments.com/hai/images/tmrs/CriticalTh inkingReviewFINAL.pdf. <sup>28</sup> Nowacek and Mountin, "Reflection in Action."

<sup>29</sup> CTL Notebook, Spring 2009, volume 11, Issue 4, Ignatian Pedagogy, St. Louis University, <u>http://www.slu.edu/Documents/cttl/theNotebook-</u> 11\_4.pdf.

<sup>30</sup> See C. Meirose, Foundations, Washington DC: Jesuit Secondary Education Association, 2001; W. Spohn,, S.J. (Spring 2001), "Catholic Higher Education," paper presented at Joint Consultation: Commonwealth Foundation Faith & Reason Institute,

http://www.catholicsinpublicsquare.org/papers/spring2001j oint/spohnpaper/spohnpaper1.htm.

<sup>31</sup> Van Hise and Massey, "Applying the Ignatian Pedagogical Paradigm,"; Sharon Chubbuck, 'Socially Just Teaching and the Complementarity of Ignatian Pedagogy and Critical Pedagogy," *Christian Higher Education*, no. 3 (2007): 239-265.

<sup>32</sup> Ibid., 249.

<sup>33</sup> Jennifer Thal Cates, Jody Huntington, John Arman, and Sondra Beres, "Applying the Ignatian Pedagogical Paradigm in Counseling and Marriage and Family Counseling," *Jesuit Higher Education* 2, no. 2 (2013),

http://jesuithighereducation.org/jhe/index.php/jhe/article/ view/41; Karen Pennington, Judy Crewell, Traci Snedden, Margaret Mulhall, and Nicole Ellison, "Ignatian Pedagogy: Transforming Nursing Education," *Jesuit Higher Education* 2, no. 2 (2013),

http://jesuithighereducation.org/jhe/index.php/jhe/article/ view/44/pdf.

<sup>34</sup> Pennington et al., "Ignatian Pedagogy," 13.

<sup>35</sup> Lai, "Critical Thinking," 36.

<sup>36</sup> See J. Carbray, "Our Relationship Was a Pedagogy and Curriculum" *Journal of Curriculum and Pedagogy*, 2008, 5 (1) 60-62. 2009: 60-62; Marshall Gregory, "Curriculum, Pedagogy, and Teacherly Ethos," *Pedagogy*, no. 1 (2001): 69-89; Lisa Tsui, "Faculty Attitudes and the Development of Students' Critical Thinking," *The Journal of General Education* no. 1 (2001): 1-28.

<sup>37</sup> See D. Kolb, "The Theory of Experiential Learning," accessed October, 4, 2011,

http://reviewing.co.uk/research/experiential.learning.htm; Richard Greenaway, Active Reviewing Guide, accessed October, 4, 2011,

http://reviewing.co.uk/research/experiential.learning.htm#2. <u>6#ixzz2a3nLK8lQ</u>; S. Leafgren, D. DeBenedictis, D. Keller, K. Kesson, "An Evolving, Proliferating Conversation," *Journal of Curriculum and Pedagogy*, no. 1 (2004): 81-98; Emerging Issues in the Practice of University Learning and Teaching, "It Works in Practice but Will It Work in Theory? The Theoretical Underpinnings of Pedagogy." G. O'Neill, S. Moore, B. McMullin, eds. (Dublin: AISHE, 2005), http://www.aishe.org/readings/2005-1/.

<sup>38</sup> See Sherlynn Bessick, "Improved Critical Thinking Skills as a Result of Direct Instruction and Their Relationship to Academic Achievement," (Indiana University of Pennsylvania May 2008:1-117), <u>https://dspace.iup.edu/handle/2069/70;</u> J. Guntin, "Toward a Development of Critical Thinking in College" Polygon Spring 2012, 36. Abstract, 1-19 <u>http://www.mdc.edu/hialeah/polygon/Guntin2.pdf</u>.; Lai, "Critical Thinking," 36; F. King, M. Goodson, and F. Rohani. *Higher Order Thinking Skills. Definition, Teaching Strategies, Assessment.* Center for Advancement of Learning and Assessment (1998), 1-176. <u>http://www.cala.fsu.edu</u>.

<sup>39</sup> The Higher Education Academy, "Pedagogic Theory," accessed June 2010, <u>http://www.heacademy.ac.uk/resources/detail/internationali</u> <u>sation/ISL\_Pedagogic\_Theory</u>

<sup>40</sup> Leafgren et al., "An Evolving, Proliferating Conversation."

<sup>41</sup> Lisa Tsui, "Fostering Critical Thinking through Effective Pedagogy: Evidence from Four Institutional Case Studies." *Journal of Higher Education*, no. 6 (2002):740-763,759, http://muse.jhu.edu/journals/jhe/summary/v073/73.6tsui.h tml

<sup>42</sup> ICAJE, "Ignatian Pedagogy," i.

<sup>43</sup> Mark Smith, "What Is Pedagogy?" *The Encyclopaedia of Informal Education*, (2012): 1, <u>http://infed.org/mobi/what-is-pedagogy/.</u>

<sup>44</sup> Chubbuck, "Socially Just Teaching," 244.

<sup>45</sup> Gregory, "Curriculum, Pedagogy, and Teacherly Ethos," 69.

<sup>46</sup> See Ertmer and Newby, "The Expert Learner;" Kolb, "The Theory of Experiential Learning;" Greenaway, Active Reviewing Guide; D. Schön, *The Reflective Practitioner, How Professionals Think in Action.* (Basic Books, 1983); Peter Senge, *The Fifth Discipline: The Art and Practice of the Learning Organization* (New York: Doubleday/Currency, 1990).

<sup>47</sup> Tsui, "Faculty Attitudes," 21.

<sup>48</sup> Ibid., 1.

<sup>49</sup> Lai, "Critical Thinking," 36.

<sup>50</sup> Tsui, "Faculty Attitudes," 1.

<sup>51</sup> Ibid., 21.

<sup>52</sup> See Bessick, "Improved Critical Thinking Skills;" Kathleen Cotton, "Teaching Thinking Skills," *School Improvement Series. Northwest Regional Educational Laboratory.*, August 2006, 1-19, <u>http://www.nwrel.org/scpd/sirs/6/cu11.html;</u>Emily Lai, "Critical Thinking," 36; David Perkins, *Making Learning Whole: How Seven Principles of Teaching Can Transform Education* (San Francisco, CA: Jossey-Bass, 2009); Tsui, "Fostering Critical Thinking," Brent Wilson and Peggy Cole, "A review of cognitive teaching models," *Educational Technology Research and Development*, no. 4 (1991): 47-64, http://carbon.ucdenver.edu/~bwilson. <sup>53</sup> Philip Abrami, Robert Bernard, Evgueni Borokhovski, Anne Wade, Michael Surkes, Rana Tamim, and Dai Zhang, "Instructional Interventions Affecting Critical Thinking Skills and Dispositions: A Stage 1 Meta-Analysis," *Review of Educational Research*, no. 4 (2008): 1121

54 Lai, "Critical Thinking," 36.

<sup>55</sup> ICAJE, "Ignatian Pedagogy," i.

<sup>56</sup> Peter Facione, "Critical Thinking: What It Is and Why It Counts," published by *Insight Assessment. Measuring Thinking Worldnide*, (2010), <u>www.insightassessment.com/pdf\_files/what&why2006.pdf</u>..

57 Tsui, "Fostering Critical Thinking."

<sup>58</sup> Ibid., 759.

<sup>59</sup> Lai, "Critical Thinking," 36.

<sup>60</sup> Annetta Kit Tsang, "In-Class Reflective Group Discussion as a Strategy for the Development of Students as Evolving Professionals," *International Journal for the Scholarship of Teaching and Learning*, no. 1 (2011): 16-17, <u>http://www.georgiasouthern.edu/ijsotl.</u>

61 ICAJE, "Ignatian Pedagogy," i.

<sup>62</sup> Robin Sereno, student paper LEOR 3160, 2013.

63 ICAJE, "Ignatian Pedagogy," 19.

64 Bessick, "Improved Critical Thinking Skills."

65 Ibid., 64.

66 ICAJE, "Ignatian Pedagogy," i.

67 Facione, "Critical Thinking."

<sup>68</sup> Jose Guntin, "Toward a Development of Critical Thinking."

<sup>69</sup> ICAJE, "Ignatian Pedagogy," 6.

<sup>70</sup> Jillian Kinzie, "Promoting Student Success: What Faculty Members Can Do," *Occasional Paper No. 6*. (2005), <u>http://www.bridgew.edu/Teachingandlearning/pdf/DEEP</u> <u>Practice Brief 6 What Faculty Members Can Do rev.pdf</u>.

71 Ibid., 2

72 Facione, "Critical Thinking."

<sup>73</sup> ICAJE, "Ignatian Pedagogy," 25.

<sup>74</sup> Alexandra Sielaff, Ph.D., Our Thanks to. Adjunct Assistant Professor Marquette University and Researcher and Evaluator, Milwaukee School of Engineering.

<sup>75</sup> Brian Truka, Written reflection on the impact the IPP had on his teaching, Fall 2011

76 Bazely, "Analyzing Qualitative Data."

<sup>77</sup> Ibid.; Gery Ryan and H. Russell Bernard, "Techniques to Identify Themes," *Field Methods* 15, no. 1 (2003): 85–109.

#### Bibliography

Abrami, Philip, Robert Bernard, Evgueni Borokhovski, Anne Wade, Michael Surkes, Rana Tamim, and Dai Zhang. "Instructional Interventions Affecting Critical Thinking Skills and Dispositions: A Stage 1 Meta-Analysis." *Review* of Educational Research. no. 4 (2008): 1102-1134.

Association of Jesuit Colleges and Universities. "The Jesuit, Catholic Mission of U.S. Colleges and Universities." September 2012. <u>http://www.ajcunet.edu/Assets/Publications/File/The</u> Jesuit Catholic Mission of Jesuit Colleges and Universities\_PDF.pdf.

- Bazely, Pat. "Analyzing Qualitative Data: More Than Identifying Themes." *Qualitative Research* 2 no. 2 (2009).
- Bessick, Sherlynn. "Improved Critical Thinking Skills as a Result of Direct Instruction and Their Relationship to Academic Achievement." Dissertation. Indiana University of Pennsylvania, May 2008: 1-117. https://dspace.iup.edu/handle/2069/70.
- Carbray, Julie. "Our Relationship Was a Pedagogy and Curriculum." Journal of Curriculum and Pedagogy, (2008):5 (1), 60-62.
- Carlile, Orison and Anne Jordan. Emerging Issues in the Practice of University Learning and Teaching.. Dublin: AISHE, 2005. "It Works in Practice but Will It Work in Theory? The Theoretical Underpinnings of Pedagogy." <u>http://www.aishe.org/readings/2005-1/</u>.
- Cates, Jennifer Thal, Jody Huntington, John Arman, and Sondra Beres. "Applying the Ignatian Pedagogical Paradigm in Counseling and Marriage and Family Counseling." *Jesuit Higher Education* 2, no. 1(2013) <u>http://jesuithighereducation.org/jhe/index.php/jhe/artic le/view/41/pdf.</u>
- Chubbuck, Sharon. "Socially Just Teaching and the Complementarity of Ignatian Pedagogy and Critical Pedagogy." *Christian Higher Education*. no. 3 (2007): 239-265.

Communities of Practice: The Organizational Frontier." Harvard Business School Working Knowledge Archive, February 22, 2000. <u>http://hbswk.hbs.edu/archive/1317.html.</u>

Cotton, Kathleen. "Teaching Thinking Skills." School Improvement Series. Northwest Regional Educational Laboratory. August 2006: 1-19. http://www.nwrel.org/scpd/sirs/6/cu11.html.

CIE Notebook. Spring 2009 volume 11 Issue 4. Ignatian Pedagogy. St. Louis University. <u>http://www.slu.edu/Documents/cttl/theNotebook-11\_4.pdf</u>

Cutting Edge Series #1: Achieving the Dream, "Engaging Adjunct and Full-Time Faculty in Student Success Innovation." Last modified August 6, 2010. <u>http://www.achievingthedream.org/resources/cutting e</u> <u>dge\_series</u>.

Daudlin, Marilyn. "Learning from Experience through Reflection." Organizational Dynamics. (Winter 1996): 36-48.

Edwards, John and Donna Rigano. "Incorporating Reflection in the Work Practice." *Management Learning* (1998): 431-436.

Ertmer, Peggy and Timothy Newby. 'The Expert Learner: Strategic, Self-Regulated, and Reflective.'' *Instructional Science* 24(1996): 1-24.

Facione, Peter. "Critical Thinking: What It Is and Why It Counts." Insight Assessment. Measuring Thinking Worldwide (2010). www.insightassessment.com/pdf\_files/what&why2006.p df.

Greenaway, Roger. Active Reviewing Guide. "Experiential Learning Articles + Critiques of David Kolb's Theory." Accessed October, 4, 2011. <u>http://reviewing.co.uk/research/experiential.learning.ht</u> <u>m#26#ixzz2a3nLK8lQ</u>

Gregory, Marshall. "Curriculum, Pedagogy, and Teacherly Ethos." *Pedagogy*. no. 1 (2001): 69-89.

Guntin Jose. "Toward a Development of Critical Thinking in College" *Polygon* Spring 2012. 36. Abstract: 1-19. www.mdc.edu/hialeah/polygon/Guntin2.pdf.

Hayes, Christopher. "Dissertation Paradoxes, Parallels, and Pedagogy. A Case Study of Ignatian Pedagogy and Teachers' Perceptions of Its Implementation in Australian Jesuit Schools." (Ph.D. Diss. Australian Catholic University Fitzroy, 2006. <u>http://libraries.slu.edu/a/digital\_collections/spiritual-journeys/ratio.html</u>. The Higher Education Academy, 'Pedagogic Theory.'' Last modified 2009. http://www.heacademy.ac.uk/resources/detail/internationalisation/ISL\_Pedagogic\_Theory

"Ignatian Pedagogy Lesson Plans." *Instructional Science*. no. 1 (1996): 1-24. <u>http://www.docstoc.com/docs/5216218/Ignatian-Pedagogical-Paradigm-Lesson-Plans-Lesson-Title-</u> Discipline-Contributor.

International Commission of the Apostolate of Jesuit Education (ICAJE). "Ignatian Pedagogy: A Practical Approach," Rome: International Center for Jesuit Education, 1993. <u>http://www.rockhurst.edu/media/filer\_private/uploads/</u> <u>ignatian\_pedagogy\_a\_practical\_approach.pdf</u>.

King, F.J., Ludwika Goodson, and Faranak Rohani. Higher Order Thinking Skills. Definition, Teaching Strategies, Assessment. Center for Advancement of Learning and Assessment, (1998): 1-176. <u>http://www.cala.fsu.edu</u>.

Kinzie, Jillian. "Promoting Student Success: What Faculty Members Can Do." Occasional Paper No. 6. (2005). <u>http://www.bridgew.edu/Teachingandlearning/pdf/DE</u> <u>EP Practice Brief 6 What Faculty Members Can Do</u> <u>rev.pdf.</u>

Kolb, David. "The Theory of Experiential Learning." Accessed October, 4, 2011. <u>http://reviewing.co.uk/research/experiential.learning.ht</u> <u>m</u>

Lai, Emily "Critical Thinking: A Literature Review Research Report":36. Accessed June 15, 2011. <u>http://pearsonassessments.com/hai/images/tmrs/Critic</u> <u>alThinkingReviewFINAL.pdf</u>.

Lausch, Carolyn. Jesuit Secondary Education Association, "A Priviledged Moment. Teachers & Learners Walking the Way of Ignatius." Last modified 2002. http://eduignaciana.tripod.com/docum/CELReflections. pdf.

Leafgren, Sheri, Deb DeBenedictis, Dana Keller, and Kathleen Kesson. "An Evolving, Proliferating Conversation." *Journal of Curriculum and Pedagogy*. no. 1 (2004): 81-98.

Loyola University, "Ignatian Pedagogy: Tips from Loyola Faculty." Last modified October 24, 2011. <u>http://www.youtube.com/watch?v=uRegpaVY0WI</u>.

Mc Avoy, Maureen, Terrence Crowe, Robert Lotz, and Brian Truka. "The Influence of the Ignatian Pedagogical Paradigm on Instructors Integrating It into Undergraduate Courses in the College of Professional Studies at Marquette University." *Jesuit Higher Education* 1,

Jesuit Higher Education 2(2): 62-109 (2013)

no.2 (2012). http://jesuithighereducation.org/index.php/jhe

- Meirose, C. E. *Foundations*. Washington DC: Jesuit Secondary Education Association, 2001.
- Nowacek, Rebecca and Susan Mountin. "Reflection in Action. A Signature Pedagogy for the 21st Century." In *Exploring More Signature Pedagogies. Approaches to Teaching Disciplinary Habits of the Mind.*, edited by A. Haynie, R. Gerung, and N. Chick, 129-142. Sterling: Stylus Publishing LLC, 2012.
- Pennington, Karen, Judy Crewell, Traci Snedden, Margaret Mulhall, and Nicole Ellison. "Ignatian Pedagogy: Transforming Nursing Education." Jesuit Higher Education 2, no. 1(2013) <u>http://jesuithighereducation.org/jhe/index.php/jhe/artic le/view/44/pdf.</u>
- Perkins, David. Making Learning Whole: How Seven Principles of Teaching Can Transform Education. San Francisco, CA: Jossey-Bass, 2009.
- \_\_\_\_. Outsmarting I. Q., The Emerging Science of Learnable Intelligence. New York: The Free Press, 1995.
- Riel, Margaret. "Understanding Action Research." Accessed June, 6, 2010. http://cadres.pepperdine.edu/ccar/define.html.
- Ryan, Gery and H. Russell Bernard. "Techniques to Identify Themes." *Field Methods* 15, no. 1 (2003): 85-109.
- St. Aloysius College, "The Ignatian Pedagogy Paradigm." Accessed July 22, 2013. <u>http://www.staloysius.nsw.edu.au/jesuits/ipp/noteworth</u> <u>v.asp.</u>
- St. Louis University. "Ignatian Pedagogy Overview." Accessed October 1, 2012. <u>http://www.slu.edu/cttl/resources/ignatian-pedagogy.</u>
- St. Louis University. "Spiritual Journeys: Ratio Studiorum." Accessed September 2012. <u>http://libraries.slu.edu/a/digital\_collections/spiritual-journeys/ratio.html</u>.
- Schön, Donald. The Reflective Practitioner, How professionals think in action. Basic Books, 1983.
- Senge, Peter. The Fifth Discipline: The Art and Practice of the Learning Organization. New York: Doubleday/Currency, 1990.

- Smith, Mark K. "What is Pedagogy?" The Encyclopedia of Informal Education. (2012): 1. <u>http://infed.org/mobi/whatis-pedagogy/</u>.
- Spohn, William, S.J. (2001, Spring). Catholic Higher Education. Paper presented at Joint Consultation: Commonwealth Foundation Faith & Reason Institute. <u>http://www.catholicsinpublicsquare.org/papers/spring20</u> 01joint/spohnpaper/spohnpaper1.htm
- Tips for New Teachers at RJHS. "Profile of an Ignatian Educator." Accessed July 22, 2013. <u>http://tipsfornewteachersatrjhs.wikispaces.com/Profile</u> of an Ignatian Educator
- Truka, Brian. Written reflection on the impact the IPP had on his teaching. (Fall 2011.)
- Tsang, K.T.L. "In-class Reflective Group Discussion as a Strategy for the Development of Students as Evolving Professionals." *International Journal for the Scholarship of Teaching and Learning*. no. 1 (2011): 16-17. <u>http://www.georgiasouthern.edu/ijsotl</u>.
- Tsui, Lisa. "Faculty Attitudes and the Development of Students' Critical Thinking." *The Journal of General Education.* no. 1 (2001): 1-28.
- \_\_\_\_\_. "Fostering Critical Thinking through Effective Pedagogy: Evidence from Four Institutional Case Studies." *Journal of Higher Education*. no. 6 (2002): 740-763. <u>http://muse.jhu.edu/journals/jhe/summary/v073/73.6ts</u> <u>ui.html</u>
- Van Hise, Joan, and Dawn Massey. "Applying the Ignatian Pedagogical Paradigm to the Creation of an Accounting Ethics Course." *Journal of Business Ethics*. (2010):453-465.
- Van Note Chism, Nancy, N. Douglas Lee, and Scott Evenbeck. "Faculty Development for Teaching Innovation." *Liberal Education.* no. 3 (2002): 34-41. <u>http://www.eric.ed.gov/ERICWebPortal/search/detailm</u> ini.jsp? nfpb=true& &ERICExtSearch SearchValue 0= EI655822&ERICExtSearch SearchType 0=no&accno= EI655822.
- Wilson, Brent and Peggy Cole. "A Review of Cognitive Teaching Models." *Educational Technology Research and Development.* no. 4 (1991): 47-64. http://carbon.ucdenver.edu/~bwilson.

# Appendix A

## MARQUETTE UNIVERSITY UNDERGRADUATE STUDENT LEARNING OUTCOMES:

#### The mission of Marquette University is to provide *a transformative education which prepares individuals to be societal leaders of conscience.* Students who complete an undergraduate degree at Marquette University students will be prepared to:

- 1. Integrate knowledge into a comprehensive, transcendent vision of life.
- 2. Apply the knowledge and skills of an academic discipline, program, or profession to a career or graduate study.
- 3. Utilize critical thinking and reflection to effect positive change in themselves, others, and their communities.
- 4. Communicate in modes appropriate to various subjects and diverse audiences.
- 5. Exercise just, responsible and competent leadership in professional, intellectual, and social contexts.
- 6. Act for social justice within the diverse global human family.

http://bulletin.marquette.edu/undergrad/academicprograms/ retrieved 06/10/10

#### College of Professional Studies Learning Outcomes:

#### A student graduating from the College of Professional Studies will be able to:

- 1. Apply intrapersonal reflection to continually assess one's leadership philosophy. (Self)
- 2. Assess how one's leadership philosophy impacts interpersonal and group interactions. (Others)
- 3. Understand the ethical and systemic consequences of decision-making on individuals, groups, societies, and environments. (World)

http://www.marquette.edu/cps/adult\_degrees\_organization\_leadership.shtml retrieved 06/10/10

# Appendix B

#### Final Paper: Systems Intervention Rubric (100 pts.)

Due: Class 8

Length: 5-8 pages

**Requirements:** Minimum of **6** references from readings and **6** research-based sources, typed, double-spaced. Incorporation of information from study group presentations and lectures is encouraged as long as you cite in paper.

#### **Required Format:**

#### Introduction:

Describe the system (Environment or Health Care) you selected and why so that your thinking is transparent and substantiated.

#### Body of Paper:

Incorporate in the research based sources with citations, anecdotal information, classroom materials (didactic, study group, journal entries,) AND

- Utilize systems thinking language: events, patterns, structure, formulate the problem, 4 key variables,
- **Graph** the interconnections utilizing BOT, Behavior Over Time graph and **diagram** with CLD Causal Loop Diagrams

## **Conclusions:**

Integrate and synthesize your understanding of IPP and ST by applying them to the system depicted in the movie i.e. health care or environment and draw conclusions based on the use of the constructs. In addition, indicate what your baseline starting point (*perhaps* a good opportunity to use a BOT) was in relation to these thinking strategies and where you are now. Discuss with clarity what the benefits of using these 2 constructs RTS and ST (*perhaps* another good opportunity to use a CLD) are in your school, home, or work life. *Adheres to page limit, use college level writing style, spell check, and reread before posting to drop box.* 

#### Rubric next page.

| LEOR 3160<br>Final   | A: 94-100 pts.  | B: 88-93pts.   | C: 82-87 pts.  | D: 76-81pts.   | F: 75-0 pts.  |
|----------------------|---|--|--|--|---|
| assignment<br>Rubric |   |  |  |  |   |
| Organization         | Paper is well<br>organized into<br>Introduction with<br>clear id of system<br>and intervention.<br>RTS (IPP or<br>PME) and ST<br>language is used<br>accurately 100%<br>of time in<br>describing system<br>and rationale.<br>Graphs/ diagrams<br>are drawn<br>correctly and<br>clearly illustrate<br>intervention.<br>Conclusion is a<br>summary of the | Paper is<br>organized with<br>a beginning,<br>middle, and<br>end<br>RTS (IPP or<br>PME) and ST<br>language is<br>used accurately<br>80% of the<br>time.<br>Graph is drawn<br>accurately.<br>Conclusion is<br>summary of<br>paper | Paper is<br>disorganized.<br>RTS (IPP or<br>PME) and ST<br>language is used<br>accurately 50%<br>of the time.<br>Graphs &<br>diagrams are<br>drawn with<br>errors. | Paper is<br>disorganized.<br>RTS (IPP or<br>PME) and ST<br>language is<br>used 30% of<br>the time.<br>Graph<br>and/or<br>diagrams are<br>poorly<br>constructed<br>with multiple<br>errors. | Nothing<br>handed in<br>or what is<br>handed in is<br>incomplete. |
|                      | ideas in body of<br>the paper<br>including the<br>thesis being<br>substantiated and<br>reached and<br>implications for<br>the future.   |  | D 1  | D  |   |
| Development          | Provides evidence<br>of reading books<br><i>and</i> articles.<br>Incorporates 12<br>research-based<br>references by into<br>body of paper to<br>substantiate<br>position.   | Provides<br>evidence of<br>reading books<br><i>and</i> articles and<br>includes 6<br>research-based<br>references and<br>cites<br>appropriately.   | Provides<br>evidence of<br>reading books <i>or</i><br>article —not<br>both.  | Does not<br>provide<br>evidence of<br>reading<br>articles or<br>books.<br>Opinions<br>offered and<br>superficial<br>discussion of  | No<br>cohesive<br>flow.   |

| LEOR 3160<br>Final<br>assignment<br>Rubric | A: 94-100 pts.   | B: 88-93pts.   | C: 82-87 pts.   | D: 76-81pts.  | F: 75-0 pts.                     |
|--|--|--|---|---|----------------------------------|
|  |  |  |   | IPP and ST.   |                                  |
| Authoring                                  | Integrates<br>metacognitions or<br>describes<br>"thinking about<br>what I am<br>thinking about" in<br>relation to all parts<br>of the assignment.  | Integrates<br>metacognitions<br>or describes<br>"thinking about<br>what I am<br>thinking about"<br>in relation to<br>80% of the<br>entire<br>assignment.                           | Merely reports<br>observations or<br>opinions—little<br>insight or<br>evidence of<br>"thinking about<br>what I am<br>thinking about."<br>Responses are<br>succinct. | Brief,<br>cursory,<br>and/or<br>rambling and<br>states the<br>obvious.  | No or very<br>poor<br>narrative. |
| Style                                      | APA is utilized.<br>Responses are<br>thoughtful,<br>substantive,<br>succinct, creative,<br>and insightful.<br>States what was<br>interesting,<br>challenging,<br>surprising etc.<br>about the<br>assignment. | APA is utilized.<br>States what was<br>interesting,<br>challenging,<br>surprising etc.<br>about the<br>assignment.<br>Responses are<br>Succinct,<br>thoughtful and<br>substantive. | Writing style<br>utilized<br>personal/social<br>writing style<br>with errors.<br>States only what<br>was challenging<br>about the<br>assignment.                    | Writing style<br>is sloppy and<br>with errors.<br>Omits stating<br>what was<br>interesting,<br>challenging,<br>surprising,<br>etc. about the<br>assignment. | No<br>comments.                  |

# Appendix C

IPP Faculty Questionnaire

| IPP             |   | Course Title                                   | Instructor             | Dates                     | No. of students                 |  |  |
|-----------------|---|--|------------------------|---------------------------|---------------------------------|--|--|
| Context 1       | 1) What have I done to create an environment and opportunity (ies) to effectively employ IPP in the classroom in a manner that facilitates student learning?  |  |                        |                           |                                 |  |  |
| Response<br>Cl  |   |  |                        |                           |                                 |  |  |
| Experience<br>2 | 2) What p   | oast experiences have                          | impacted my present a  | attitudes & capacities fo | or teaching?                    |  |  |
| Response<br>Ex1 |   |  |                        |                           |                                 |  |  |
| Reflection<br>1 | 1) What h   | ave I done to develo                           | p my instructional app | roach to better unders    | tand the needs of students?'    |  |  |
| Response<br>RI  |   |  |                        |                           |                                 |  |  |
| Reflection<br>2 | 2) How he practices?  |  | ponses given me an ind | ication of my success in  | n imparting IPP principles and  |  |  |
| Response<br>R2  |   |  |                        |                           |                                 |  |  |
| Reflection<br>3 |   | as the dynamic in th<br>the result of a cataly |                        | fueled a new didactic     | praxis based on changed views   |  |  |
| Response<br>R3  |   |  |                        |                           |                                 |  |  |
| Action 1        |   | actions have I taken<br>t of using the IPP?    | to improve my teachin  | g, not only for this cou  | rse, but for all courses taught |  |  |
| Response<br>Al  |   |  |                        |                           |                                 |  |  |
| Action 2        | 2) How have I created opportunities for the student for the continuous interplay of experience, reflection, action?   |  |                        |                           |                                 |  |  |
| Response<br>A2  |   |  |                        |                           |                                 |  |  |
| Evaluation<br>1 | 1) What metrics am I using to discern the growth of the student & myself as a result of being exposed to the IPP (i.e. cognitive, relational, emotional, service to others, direct feedback from students or)?  |  |                        |                           |                                 |  |  |
| Response<br>Evl |   |  |                        |                           |                                 |  |  |
| Evaluation<br>2 | 2) "How have my behaviors inside & outside of the classroom changed as a result of integrating the IPP into my course?  |  |                        |                           |                                 |  |  |
| Response<br>Ev2 |   | 40-545-853-0                                   |                        |                           |                                 |  |  |
| Evaluation<br>3 | 3) If I have grown from using the IPP, where does that growth fall along the continuum, from a thinking strategy to discernment to service to others to spirituality? Please provide evidence in measurable terms that substantiates where the growth occurred. |  |                        |                           |                                 |  |  |
| Response<br>Ev3 |   |  |                        |                           |                                 |  |  |