

Art Education and Disability: Re-envisioning Educational Efficiency

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value of efficiency has long been an ideal of educational policy in the United States (Guthrie, 1980). Where the education—and especially the art education—of students who are experiencing disabilities¹ is concerned, traditional notions of efficiency (which are primarily rooted in economic standards of measure) may prove inflexible and inadequate in assessing educational outcomes. Guthrie (1980) equates efficiency in the schools with productivity.² He explains that a number of factors may affect productivity, including availability of resources and students' environment and social background; likewise, students' varying (dis)abilities can be added to these factors. Indeed, traditional educational efficiency emphasizes autonomy and uniform delivery of services over responsiveness to diversity of needs and the individualized education mandated by the Individuals with Disabilities Act (IDEA) for (pre)K-12 students who are experiencing disabilities. Semmel, Gerber, and Macmillian (1995) question whether the actual practice of special education is aligned with the *intentions of the system* of education. They imply that school districts may actually resist the inclusion of students experiencing disabilities into the general classroom setting because the segregationist form of special education was designed for reasons of economy and efficiency. What, then, are these roots of educational efficiency, and what role can/should the value of efficiency play in specialized education under the IDEA? Is there an

approach to efficiency in the art education of students experiencing disabilities that may still address a diversity of needs? Here, I examine the background of the value of efficiency in education and how the IDEA apparently defines this value in serving the special educational needs of students experiencing disabilities. I also investigate this value through case study findings of a high school art class as an inclusive educational setting.

Survey of Educational Efficiency

The history of efficiency in education begins in the late 19th century. Educational efficiency measures outputs through cost-benefit analysis or human capital theory, with economics at the nucleus (Apple, 1995; Levin & Shank, 1970; Welch, 1998). Under this paradigm, responsiveness to a diversity of needs (which does not necessarily measure outcomes in economic terms) gives way to uniformity and corporate organization. Wilson and Wright (1994) explain traditional notions of educational efficiency:

In a highly bureaucratic and tightly regulated environment all students are expected to master the same objectives, in a similar time frame, under ostensibly uniform conditions, regardless of individual interests or capacity, learning needs, personal circumstances or choice. The typical school strategy for coping with diverse groups of students is to segment and segregate their learnings, tracking their course work, according to perceptions of their ability. (p. 227)

The rise in Industrialism, in the late 19th and early 20th centuries, gave emergence to an interesting paradox: The “American individualism” that was so admired and necessary for capitalism to thrive had to be curbed in order to promote orderliness and efficiency,

both industrially and socially (Kliebard, 1987). While the individualist aspect of society provided impetus for industrial growth and innovation, this quality was not desirable in the worker who must conform to operation standards in order to keep industry moving smoothly.

Taylorism and scientific management. Frederick Winslow Taylor championed industrial efficiency in his *Principles of Scientific Management* (1911). He described a method for the study, analysis, and implementation of efficient movement within a job task. Through this method, complex tasks are broken down into component parts. The abilities of the worker are not strained, and, simultaneously, productivity increases.³ Taylor, an engineer, insisted that his system could be applied to all industries; it was not long before his ideas were applied to education. John Franklin Bobbitt (1941) was a leader in educational administration at the University of Chicago. Bobbitt's application of Taylor's ideas to education included a scientific measure to predict a student's future life role and a differentiation of curriculum to meet that individual's predicted needs within that role. He emphasized adherence to teaching methodologies that were proven superior to the exclusion of other methods, acknowledging that this narrowing of the teacher's freedom is necessary and justifiable (Callahan, 1962).

Sneddin and social efficiency. Almost concurrent with Taylorism and scientific management was the social efficiency movement in education. David Snedden, one of social efficiency's biggest proponents, advocated predicting the probable destination of the individual and customizing education to meet that individual's needs. His emphasis differs from Taylor's in that he was concerned with social change brought about through change in individuals, while Taylor is concerned with business principles and costs-per-units (Drost, 1967). Social efficiency strove to make society better by producing individuals who

are responsible and vocationally practicable. To those who argued against this tracked system of education, Snedden (1913) responded:

In native capacity and in educational need people are unequal at birth and can in no way be made equal. An educational system, suited to the needs of democracy, must be indefinitely flexible in order that each may have before him [or her] the educational opportunities, which shall enable him [or her] best to serve society and himself [or herself]. (p. 20)

Ironically, Snedden viewed democratic, flexible education as that which tracked the student according to his or her apparent cognitive ability. He claimed that educational opportunity is rooted in this ability and probable future life role rather than class (ignoring that economics is a determining factor in future life role). He advocated the removal of students who experience mental retardation from the general school setting in favor of placement in specialized schools. Such institutional placement, though not new at the turn of the century, increased emphasis on vocational efficiency. It also increased focus on art education as a rehabilitative tool (where those experiencing disabilities were concerned), a way to “fix” what was “broken,” thereby creating a more productive member of society (Blandy, 1991).

Recent efficiency models in education. Following the efficiency emphasis of Taylor and Snedden (with perhaps more focus upon Taylor’s business principles), districts introduced the efficiency expert into the schools (Welch, 1998). Wright and Allen (1929) describe the role of the efficiency engineer in education as the same as that in industry. The purpose of such experts was to ensure that quality was attained at minimum cost in terms of “time, energy, or money” (Wright & Allen, 1929, p. 8). Education policy makers regarded education as an investment to which business principles apply.

The accountability movement in education gained momentum in the late 1960s and early 1970s, and its proponents required that schools justify expenditures and proposed budget increases. Schools were also required to implement strategic planning business procedures and produce equity in results, in spite of “so-called ability, interest, background, home, or income” (Lessinger, 1971, p. 8).⁴ Accountability advocates apply such terms as “market research,” “contractual agreement,” and “research and development” to public education.

Recent efforts at educational efficiency provided for privatization of public schools. Under this model of productivity, schools operate under the authority of corporate owners, a practice facilitated by the increased perception of education as a commodity. Such privatization assumes that the public sector is inefficient and suggests that “big business” could operate schools at a profit (Welch, 1998).

Regaining Sight of Others: Efficiency Models and the Art Education of Students Experiencing Disabilities

Welch (1998) argues that the type of efficiency that has prevailed since the industrial era (that is based on the assumption that productivity is measured in terms of market value) is responsible for reducing the quality of education. He explains that this type of efficiency ignores issues of inequality that are based on class, race, gender, and disability, pointing out that disadvantaged or marginalized groups are likely to lose the most to standards of efficiency. He maintains that efficiency based in equity concerns possesses a different system of accountability and is based on different principles than a system based upon market principles. While issues of economics continue to be a factor for many in defining and measuring school effectiveness and productivity (Lewis, Bruininks, & Thurlow, 1991; Verstegen, 1994), some educators are turning to alternative methods of evaluation that include a variety of indicators. For instance, Turnbull's (1991) communitarian model advocates a changing paradigm regarding

views and measures of efficiency. His approach diminishes the emphasis on monetary factors (such as educative costs and future potential student earning power) as a measure for efficiency in favor of factors that consider individual differences.

Turnbull (1991) traces the role of efficiency in society as it has been applied to those with disabilities by pointing out that, in the distant past, those who had developmental disabilities were considered "unable to learn or earn" (p. 7). He offers that, while a person may not always be able to be productive in an economic way, he or she is still able to make contributions that may not be evaluated only by economic criteria. Productive contribution to society is not always measured in terms of dollars but may also be measured in terms of what members of society learn from one another in an effort to create a community that acknowledges equality and liberty for all of its members. For instance, when members of a community are able to appreciate the diversity of experiences among its members—regardless of ability or disability—their community becomes richer, more expansive, more reciprocal in its desire to invest in individuals (and the individual's desire to invest in the community), and more democratic.

For this reason, Turnbull (1991) prefers an emphasis on the term *contribution* rather than *productivity* (a word which seems to have monetary connotations attached), when discussing efficiency. He argues that there has long been the assumption that a person's quality of life or worth can be measured as equal to his or her productivity within home and society multiplied by his or her natural capability. According to this equation, when costs exceed benefits, the individual should no longer count on medical treatment and government protection of that treatment or of other services. This, he says, is "an inevitable result of a cost: benefit criterion for analyzing policy" (Turnbull, 1991, p. 20).

Likewise, Welch (1998) advocates an efficiency that is humane and takes into account notions of both equality and difference. This type of inclusive efficiency, which measures productivity in terms of (not necessarily economic) contribution to the community, promotes a quality education, not just for those with special needs, but for all stakeholders within the system. Though not as sleek and quantifiable as dollar driven definitions of efficiency, communitarian efficiency has the ability to better address the needs of all stakeholders within the classroom, regardless of ability or disability. It extends beyond vocational issues to encompass broader issues of society at large, including personal and community responsibility and empowerment.

Communitarian Efficiency and the IDEA

Efficiency in the IDEA. Congress, in its early formulation of the special education mandate, revealed a cost-benefit approach to efficient education as it weighed the benefits of an appropriate and individualized education for those experiencing disabilities against the pitfalls of not educating these individuals appropriately who might then, otherwise, become financial burdens upon society (S. Rep. No. 168, 1975). Even as recently as the passage of the IDEA Amendments of 1997, members of Congress pointed to the potential vocational needs of students experiencing disabilities as a key concern of the law. Senator Jeffords demonstrated this tendency to align contribution to society with economics when he stated:

The bottom line is that when it comes time to graduate from high school, we must make sure that our students, all students, have the skills to either pursue postsecondary education or training, or to *get a good job and be contributing members of our communities* [my emphasis] to the utmost of their abilities. . . .

My message to you today is simple: This Nation is facing an educational crisis in which 50 percent of our high school graduates are functionally illiterate and not prepared to enter the workplace.

If we are going to maintain our economic standing as a Nation, we must do much better. (*Reauthorization of IDEA*, 1997)

The IDEA itself, though, emphasizes the right of all individuals to participate in and contribute to society, explaining that educational results promote independent living (20 U.S.C. § 1400). The IDEA regulations describe the philosophy of independent living as inclusive of the concepts of

Consumer control, peer support, self-help, self-determination, equal access, and individual and system advocacy, in order to maximize the leadership, empowerment, independence, and productivity of individuals with disabilities, and the integration and full inclusion of individuals with disabilities into the mainstream of American society. (34 C.F.R. Part 300, App. A)

The law and its regulations combined, then, reveal a definition of contribution to society that extends beyond mere economic contribution and is more communitarian in nature. Here in its philosophy of independent living, the mandate demonstrates contribution to society through such qualities as empowerment, advocacy, leadership, and self-determination. Clearly the philosophy behind the law illustrates a communitarian approach to educational efficiency and to preparation for one's future role in society. It follows, therefore, that the inclusive (art) class—one that educates learners with a variety of (dis)abilities—should seek to provide opportunities to develop the individual in these aspects of contribution through full participation and self-actualization, for these are among the bases of the philosophy behind the special education mandate. Education that provides for these opportunities constitutes the efficient education, according to IDEA philosophy, of the student experiencing disabilities.

The Role of the Individualized Education Program (IEP). The IEP, therefore, plays a valuable role in the appropriate education of students experiencing disabilities, an individualized approach tailored to the unique special educational needs of the student. In order for this to take place, the student's needs (resulting from the disability) must be met in such a way that the child is able to progress and *be involved in* the general curriculum (20 U.S.C. § 1414). Involvement implies an interactive and participatory, rather than passive, role within instruction. The special education law describes the IEP as the written educational plan that is developed for each child experiencing a disability. The IEP includes, among other items, information on: (a) the student's current level of performance; (b) a description of the disability and how it affects current involvement in the general curriculum; (c) measurable goals and objectives for enabling the student to be involved in and progress within the general curriculum; (d) a description of the special education, related and supplementary aids and services, and modifications that will be provided for the student to enable him or her to be educated and participate with nondisabled students and to be involved in extracurricular and nonacademic activities; and (e) "an explanation of the extent, if any, to which the child will not participate with nondisabled children in the regular class and in the activities described in this clause" (20 U.S.C. § 1414(1)(A)(iv)).⁵

Productivity and the Least Restrictive Environment (LRE). In IDEA, the free appropriate public education (FAPE) clause states that education for students experiencing disabilities should: (a) be free to parents; (b) be specialized and include related services (i.e., occupational therapy, speech therapy, etc.); (c) be appropriate to the student's needs as set forth in the IEP; and (d) meet state standards. Likewise, the LRE clause mandates that children experiencing disabilities should be educated alongside their "typical" peers to the maximum extent

appropriate for their educational needs; they should only be removed from the general class environment when they cannot be educated satisfactorily there. The concept of *appropriateness* is at the core of the special education law, through the combined FAPE and LRE mandates. The IEP, therefore, acts as the documented plan for ensuring the most efficient and effective plan for educating a specific student, one that is tailored to meet his or her individuated special educational needs.

Through the IEP, the student acquires the skills necessary to realize the productivity, self-determination, and empowerment alluded to in the federal regulations of IDEA.⁶ If the goal of specialized education is to empower individuals to assume a contributory role within society, then the idea of how to most effectively provide for this future role ensues. Both the legislature and the courts have acknowledged specialized education as a means to this end.

Efficiency and the Art Class as a LRE. Lawmakers and the courts perceive the art class as a “nonacademic” setting; for that reason, it is often one of the first testing grounds for inclusion of students who are experiencing disabilities (Schiller, 1999). Arnold (1999) maintains that the subject of art has the potential to involve a diverse range of learners in the educative process.⁷ A normalization approach to inclusion allows the student experiencing disabilities to function within the class in a way most resembling his or her “typical” peers. Anderegg and Vergason (1996) maintain that normalization focuses upon the mastery of foundational adaptive behaviors that enable the individual to be a wholly involved and functioning member of (the classroom) society. Normalization, they argue, considers the ends rather than the means; normative strategies include ensuring that the learner experiencing disabilities is involved in age-appropriate activities and materials within the art classroom (Blandy, Pancsofar, & Mockensturm, 1988).

In examining the (Pre)K-12 art class as a productive LRE for students experiencing disabilities, several areas of interest emerge, including: (a) academic benefit from experience in the LRE, (b) whether

all students—regardless of ability or disability—are regarded as productive contributors to the classroom community and allowed opportunities to contribute (non-academic benefit), (c) how the support structure that is in place in the LRE affects the productive contribution of stakeholders in the class, and (d) stakeholder perceptions of what constitutes an efficient use of time in the art classroom.

A case study (Kraft, 2001) of a high school art class as a LRE examined these aspects of (communitarian) efficiency.⁸ The class of 32 students included Alfred,⁹ a student experiencing autism and who was essentially non-verbal, along with student's possessive of a wide range of (dis)abilities. It was clear, during the course of the case study, that the art teacher Mr. Alan viewed Alfred's productivity in the class differently than that of other students. Mr. Alan perceived the use of an instructional aide as integral to Alfred's performance in the classroom, stating that Alfred "needs help doing *everything*" (Personal communication, April 5, 2000).¹⁰ Alfred's mother, too, indicated Alfred's need for help and supervision, explaining:

I do so much *for* him, and it makes the teachers mad . . . I don't think they really understand autism at all because they want him to be independent, and it's like, yeah, he can be independent at a point . . . I was happy with [the self-contained class when Alfred was younger] because there always was . . . small classes, and, you know, more than one teacher. You know, a teacher and an aide. (Personal communication, May 16, 2000)

Often, though, the instructional aide's presence at Alfred's side acted as a barrier to inclusion in that his peers did not interact with him while she was nearby. Mr. Alan himself did not work with Alfred as often when the aide was present as he did in her absence. Frequently, the aide, Ms. Gutierrez, would leave the class for long periods—as much as 30-40 minutes. These absences were clearly frustrating to Mr. Alan,

but—while he expressed his irritation on more than one occasion to me—he never mentioned it to Ms. Gutierrez or to the special education teacher Mr. James.

Mr. Alan also felt that Alfred made little to no progress in the art class, describing his work as “very schematic” (Personal communication, April 5, 2000). While he was disappointed in Alfred’s progress in his artwork, Mr. James and Ms. Hodges were impressed. Mr. James said, “I would have felt like some of his artwork was as good as and better than some of the regular students in [the art class]” (Personal communication, April 26, 2000). Part of these differences in opinions regarding Alfred’s progress, I surmised, might be due to Mr. James’ and Ms. Hodges’ familiarity with Alfred’s experiences with autism and his resulting needs and abilities. Mr. Alan, who spent considerably less time with Alfred than these other two, knew less about the manifestations of the disability and Alfred’s academic progress. Mr. Alan utilized a similar measure for efficiency and productivity with Alfred’s work as he might have with that of his “typical” students, but Mr. James and Ms. Hodges were able to compare the effectiveness of Alfred’s work to his own past performance, in light of his special educational needs.

Mr. James and Ms. Hodges also spoke of the nonacademic benefits of Alfred’s inclusion in the art class. Mr. James acknowledged that, even if the “nondisabled” students did not interact with Alfred as much as he might like, that Alfred “learns from the incidental learning of seeing how they behave and how they act” (Personal communication, April 26, 2000). Indeed, Alfred often emulated the activities of his peers as he observed them at work. In one instance, as students in the class folded paper around their scratchboard according to Mr. Alan’s instructions, Alfred modeled their actions, folding his paper likewise. As Mr. Alan delivered further instructions, Alfred appeared to listen, looking in the direction of Mr. Alan as he spoke. Ms. Hodges, too,

attributed some of Alfred's more social behaviors to his involvement in art class. She felt that one outcome of his involvement was that he was more talkative at home, explaining:

“Normally, he would come in, like a normal child, and go straight to the refrigerator But [now] he comes in, and he may *say* a few words But you can kind of see that that class is—it has a big, big impact” (Personal communication, May 16, 2000).

Conclusions

Academic benefits, productive use of time, and teacher perception. In the one example of an art class as a LRE described here, it is evident that the actual implementation of the special education mandate may or may not (in whole or in part) reflect the intent of the law. The case study demonstrated the differing perceptions of Alfred's progress in art among Mr. Alan, the one most knowledgeable in the content area, and Mr. James and Ms. Hodges, those most knowledgeable of Alfred's autism. These knowledge sets, when combined, yield the most efficient path of art education for Alfred's special educational needs. During the duration of the case study, there was no contact between the art and special educators and parent. Mr. Alan also did not participate in the IEP planning at the beginning of the year, when Alfred was first included into his art class. The importance of communication and collaboration among stakeholders when designing the education for students experiencing disabilities cannot be overstated.

Nonacademic benefits. Both Mr. James and Ms. Hodges acknowledged the nonacademic benefits of Alfred's inclusion in the art class. Certainly, Alfred was able to model peer behavior and to expand his social skills from his inclusive experiences. His opportunities for “peer support” and “individual system advocacy,” as cited in the law, could be greatly increased through Mr. Alan's

intervention. When teachers provide settings and activities that require student interaction, those activities not only build community but allow all stakeholders in the class to function, on some level, as active contributors.

Support structure and the role of the instructional aide. Ms. Gutierrez, as a support for Alfred's academic and nonacademic special needs, was not used as effectively as she might have been. Her interventions fell at one extreme or another of the spectrum: while in the class, she stayed closely to Alfred's side, sometimes even taking his art projects from him to work on herself. The constant presence of an adult attached to Alfred impeded peer, and even teacher, interaction. At the other extreme, her long departures—though they yielded more interaction between Mr. Alan and Alfred—frustrated the art teacher who had 31 other students who also required his attention. Alfred, too, engaged in more off-task behaviors during Ms. Gutierrez's absences from the art class than he did in her presence. Increased collaboration and discussion between Mr. Alan, Mr. James, and Ms. Gutierrez could communicate expectations and allow for the design of strategies for addressing Alfred's art educational (and even nonacademic) needs.

Providing for communitarian efficiency in the art class. Only the *combined* efforts of the general (art) educator, special educator, and parents can efficiently and effectively provide for the needs of students experiencing disabilities in the manner envisioned by the IDEA. To this end, pre-service preparation of art educators in working collaboratively with all stakeholders in the inclusive art class setting is key. Keifer-Boyd and Kraft (2003) present one model for just such a course, one that allows pre-service art educators to teach learners experiencing a variety of (dis)abilities in an inclusive art class setting through the Human Empowerment through the ARTS (HEARTS) program. Undergraduate and graduate students enrolled in the course helped to develop HEARTS so that students experiencing moderate to

severe disabilities could be educated alongside their “nondisabled” peers in a setting that promoted full participation and contribution of all learners, according to the communitarian perspective and the philosophy of independent living behind IDEA. The design of the course emphasized student’s strengths, allowing all students to act as givers, while seeking to understand students’ “perceptions of self-advocacy and self-representation in his or her art process and product” (Keifer-Boyd & Kraft, 2003, p. 49).

Pedagogical practice within the HEARTS program, then, included empowerment and choice-making among participants of all (dis)ability levels, utilizing strategies that allowed for the fullest participation in the art-making experience. For instance, students who were visually impaired relied upon the texture of the paint, and the hard surface of the trays that provided their picture planes, to create their own paintings by touch (Keifer-Boyd & Kraft, 2003).

Student-teachers in HEARTS continually planned together, debriefed after each of the five HEARTS sessions, and rotated their students to maximize participation among members of HEARTS and to provide themselves the opportunity to work with a variety of abilities and disabilities. These practices habituated the student-teachers to working collaboratively to better serve the needs of all students in the class. Ideally, this practice would extend to the actual art class through collaboration between the art teacher, special educator, instructional aide, student, and parent(s) in serving the special educational needs of a student experiencing disabilities.

Student-teachers also incorporated activities that promoted interaction among “nondisabled” learners and those experiencing disabilities to foster community and build relationships. Toward the end of the HEARTS program, one student-teacher mentioned that “the separation between the typical and non-typical students doesn’t seem as apparent” as it had at the program’s beginning (Keifer-Boyd & Kraft,

2003, p. 52). Such a statement demonstrates the comfort level the student-teacher acquired in working in a practicum setting with learners of all (dis)ability levels.

The notions of art education, special education, and educational efficiency are not diametrically opposed. Clearly, the IDEA demonstrates a philosophy of efficient education of students experiencing disabilities that is aligned with Turnbull's communitarian perspective, a philosophy of independent living that views contribution to society as (perhaps inclusive of but) extending beyond the economic. Field-based experiences at the pre-service level in working with students who possess a variety of (dis)abilities, such as those provided for by HEARTS, may prove invaluable in preparing art teachers to educate all art students in a way that more closely resembles the communitarian form of efficiency.

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Notes

¹ I adopt Blandy's (1991) terminology of "individuals *experiencing* disabilities" here.

² I use the terms *efficiency*, *productivity*, and *effectiveness* interchangeably throughout. While some might point out that productivity and effectiveness might not be the end result of efficiency, I would argue that, within the communitarian model that I present later (and relative to the situation and/or the individual's needs), they are.

³ It is noteworthy that a similar principle, but with a different focus, exists in task analysis, an instructional method utilized with students experiencing severe disabilities.

⁴ This statement by Lessinger, former Associate Commissioner for Elementary and Secondary Education in the U.S. Office of Education, in praise of the 1965 Elementary and Secondary Education Act, dismisses the educational needs of students experiencing disabilities.

⁵ Lawmakers have even taken steps to make the IEP and its usage operate more efficiently, aligning special education curriculum to the general curriculum, including general educators in the IEP development process, requiring more appropriate measures in assessing students' individual needs (Introduction to IDEA Proposed Regulations, 1997, p. 55028), and—in the more recent 2004 authorization of IDEA—streamlining the IEP process by excluding the requirement for an IEP meeting to make changes to the program if all parties agree to those changes individually (House Education and the Workforce Committee, 2004).

⁶ Issues of efficiency have arisen in LRE-related cases more implicitly than explicitly. Most often, these issues are tied to the question of what is the most productive and effective course of action in meeting a particular student's educational needs. In *Polk v. Central Susquehanna Intermediate Unit 16 (1988)*, one issue was whether the school district's blanket policy of refusing to provide direct physical therapy to students experiencing disabilities was a violation of an *individualized* education program.

⁷ In *Sacramento City Unified School District v. Rachel H. (1994)*, the court held that non-academic benefits of inclusion, such as interacting with "typical" peers, could be one factor in determining placement of students experiencing disabilities.

⁸ See also Kraft, M. (2004). Least restrictive environment: Policy analysis and case study of a high school art class. *Visual Arts Research*, 29(1), 22-34.

⁹ All names are pseudonyms.

¹⁰ It was at Mr. Alan's suggestion, after Alfred had been in his class for several days, that an instructional aide was included as a modification to Alfred's IEP; after the addition of the aide in the art class, Mr. Alan indicated that the aide began to accompany Alfred to his other mainstream classes, as well.