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An integrated measure of student perceptions of feedback, engagement and school identification

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Abstract

Teacher feedback influences student learning, identity construction and trajectories. This study tests the measurement properties of a questionnaire designed to assess (a) student perceptions about teacher feedback; (b) student identification with school, and; (c) student engagement. 1089 students in grades 6 through 10 (mean age 13.4) participated in the study. Factor analyses yield dimensions of School Identification, Effective Feedback, Person-Centered Feedback, Engagement, and Social Acceptance. Internal consistency for principal dimensions varied between .77 and .89. The instrument is suitable for assessing student school identification, behavioral engagement, and perceptions of teacher feedback.

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Keywords: Teacher feedback, school identification, school engagement, school trajectories

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1. Context

Educational research seeks explanations about the educational contexts manifested in student school trajectories. For example, it pursues evidence that will help (a) clarify why students dissociate from, or leave, school (Archambault, Janosz, Fallu, & Pagani, 2009; Freire, Carvalho, Freire, Azevedo, & Oliveira, 2009); (b) reveal how teacher practices influence student identity (Marzano, 2003; Carvalho, Freire, Conboy, Baptista, Freire, Azevedo, & Oliveira, 2011; Klapam & Flum, 2012); (c) describe the impact of academic retention on school trajectories (Conboy, 2011; Conboy, Moreira, Santos, & Fonseca, 2013); and (d) demonstrate the association between the nature of feedback from teachers and student involvement in school activities (Pollock, 2011, 2012). But such empirical evidence has typically emerged in the literature in isolation without a clear integration.

Consensus exists in the literature regarding the importance of the educational context in the process of developing student identity (Gee, 2000; Kaplan & Flum, 2012), reconstructing knowledge (Klassem, 2006) and facilitating the control and management of cognitive abilities (Rogoff, 1999). The accumulation of school-context experiences defines the student's academic career. This affords to student identity an essential dimension of temporality, since the construction of identity is characterized by a constant negotiation of meaning and experience that develops in a temporal context (Wenger, 2007). Thus, the construction of student identity is a continuous process, unfolding along the school career through processes of participation, reification, integration, exclusion and distinction (Abrantes, 2003; Freire et al., 2009; Kaplan & Flum, 2012).

Student engagement in school emerges as one of the variables that influence the process of student identity construction. In general, student engagement includes cognitive, affective and behavioral components. In particular, the behavioral component of school engagement is reflected in student actions in the academic context, including typical practice and participation in school activities (Veiga, Galvão, Festas, & Taveira, 2012). Examples include, the completion of homework (Finn & Rock, 1997), showing up for classes and paying attention (Johnson, Crosnoe, & Elder, 2001), commitment to school work, getting good grades (Jordan & Nettles, 2000), participation in extra-curricular activities (Finn, 1993), and compliance with school rules (Fredericks, Blumenfeld, & Paris, 2004). Within the contexts of participation, student engagement is positively associated with school success and negatively associated with school leaving (Fredericks et al., 2004). Valente, Conboy and Carvalho (2009) suggest that engagement may not be a student trait, but rather a state that depends on the context of the discipline—whether it represents material that the student enjoys or not.

Teacher action also influences school trajectories. For example, the quality of the teacher-student relationship contributes both to the good atmosphere in the classroom (Wubbels & Levy, 1993) and to student engagement in learning (Schussler, 2009). The kinds of tasks proposed by the teacher, as well as teacher responses to student behavior, affect the contexts of participation (Marzano, 2003) and may contribute to the reification of positions (Carvalho et al. 2011). In carrying out school tasks and activities, feedback emerges as a fundamental factor in the teacher-student relationship (Black & Wiliam, 1998, Black, Harrison, Lee, Marshall, & Wiliam, 2002). Several studies show a clear impact of feedback on learning, performance, and self-regulated student learning (Kluger & DeNisi, 1996, 2004; Zimmerman & Schunk, 2001, 2007; Sendziuk, 2010). Good feedback must include information that the student can use. Each student must be able to understand the feedback's meaning in order to self-assess as to what has been accomplished and what is lacking in order to become more competent. In this sense, the main objective of the feedback should be to reduce the gap between student understanding and performance, on the one hand, and the educational objective, on the other (Hattie, 2009). According to the model developed by Hattie and Timperlay (2007), the strategies used by teachers to reduce this discrepancy should start with the establishment of clearly defined challenges, and plans for the use of appropriate feedback, in order to help students achieve the intended educational goals. Valente et al. (2009) suggested that how feedback is perceived by students may again be context dependent.

According to Hattie (2009), many teachers claim to provide their students with abundant feedback. However, Valente et al. (2009) found that, instead of feedback being used to reduce the discrepancies between existing understanding and desired understanding, feedback was frequently used by teachers to accuse, judge and punish. This type of person-centered feedback is not effective in promoting learning and is demonstrative of how feedback can act as a double-edged sword (Kluger & DeNisi 1996).

The theory and empirical findings about feedback, identity/identification, and engagement and how these may impact school trajectories, such as retention and school leaving, have usually emerged in the literature in isolation from one another without the clear implication of their interrelated nature. In order to give proper emphasis to the integration of these constructs, there is need for a simple measure that would fill a gap and allow for, in a given sample, the simultaneous measurement of these variables.

Therefore, in order to study the relationships among these factors, we developed a measuring instrument, the Questionnaire on Feedback, Identification, and School Trajectories (QFITE). Originally developed in Portuguese, it is our intention with this paper to share the instrument with the English-speaking scientific educational community. The present study describes the construction and the metric properties of the various dimensions of the QFITE and serves as an early step in the process of validation of the instrument.

2. Method

2.1. Construction stages of QFITE

The QFITE was developed by a multidisciplinary group in Portugal that included educational and clinical psychologists, science educators, and sociologists (Carvalho et al., 2014) The goal was to build an instrument that would allow study of the dynamics of the relations among (a) teacher feedback (as perceived by students); (b) student engagement (as perceived by students); (c) student identification with school, and; (d) school trajectories.

The first version of the QFITE included items targeting the theoretical dimensions of School Identification, Future Trajectories, Feedback and Engagement. The items were presented as statements to which students responded on a four-point scale. The selection of items was based on prior research (e.g. Handelsman, Briggs, Sullivan, & Towler 2005; Hattie, 2009; Valente et al., 2009). In the present study, the term school *identification* is used, and not identity. Some ideas identified by Martin et al. (2013) were used for this purpose, since both constructs have components in common.

Concerns for content validity of the scale (Haynes, Richard & Kubany, 1995) focused on the design and ordering of items, and the response scheme. As regards the preparation of the items, there was particular care to avoid: (a) terms that might influence or induce responses; (b) ambiguous terms; (c) double formulation questions; (d) technical language; (e) unbalanced alternative answers. Items were ordered in order to ensure that the sequence of items did not influence responses to following items (Tavares, 2007).

The original version of the QFITE was subjected to a pilot study with students in the greater Lisbon area who attended the 6^{th}, 7^{th} and 10^{th} grades. The realization of this pilot study sought to obtain feedback from students regarding the existence of problems in the interpretation of items. Based on the results of this pilot study, four items were excluded from the QFITE.

2.2. Final version of QFITE

The first substantive section of the instrument (21 items) intended to measure students' school identification (for example, "I identify with the school I attend" and "At school I feel alone") and expected school trajectories ("I am going to finish secondary school" and "I do not care about grades, as long as I pass the year"). The four-point response scale was anchored semantically (Completely agree = 3, Disagree = 0).

The second section included ten items focusing on behavioral engagement. In this section, students respond to statements (for example, "I do the homework" or "I ask questions when I do not understand the material") and rate to what extent each describes their reality as students. Two columns of response allowed each of these items to be answered under two different conditions: The instructions indicated, "Think of a *subject that you like* and respond in the left column," and "Think of a *subject you do not like* and responds in the right column." Responses were recorded on a four-point scale (Always = 3; Never = 0).

The third section was composed of 14 items that assessed student perception of teacher feedback (for example, "The forms of assessment in the discipline are presented clearly" or "The teacher comments show a lack of respect for students "). Each item was answered under the two conditions (thinking of a discipline *liked* and one *not liked*) on a scale anchored again as Always = 3 and Never = 0.

The instrument also included a demographic section (gender, age, nationality and year of schooling); a section relating to students' academic careers—trajectories (for instance, past retention levels and future goals) and their socio-economic and cultural status. Additionally there was a section with two open-response questions in which students were invited to indicate what kind of teacher comments that they appreciated, and those they did not like to hear, when teachers evaluated their work.

2.3. Sampling and Participants

The target population of this study consisted of students from middle school and early secondary education who attended the transition years between study cycles. The sample consisted of students attending the 6th, 7th, 9th and 10th grades, and was selected through a probabilistic, multi-stage sampling procedure in continental Portugal.

The final sample consisted of 1089 students in 6th grade (25.7%), 7th grade (31.7%), 9th grade (26.6%) and 10th grade (16.0%) spread over 45 public schools in continental Portugal. The ages in the sample range from 10 to 25 years (M = 13.4, SD = 1.7); 41.4 % are aged between 10 and 12 years; 46.8 % between 13 and 15 years, and; 11.8% are older than 15 years of age. The vast majority of the students (95.9 %) are of Portuguese nationality, and 52 % are female.

2.4. Procedures

Following ministerial authorization to conduct the study, schools were contacted by telephone (preferably) or via email. In cases where there was no response, contacts were repeated. In the case of school refusal to participate, or when no response was attainable, the replacement of the school was carried out through a new random stratified selection. Student participation was subject to authorization by parents/guardians. General instructions informed students about the study objectives, requested their voluntary participation, and guaranteed the confidentiality of their answers. For statistical analyses we used SPSS 22.0 for Windows.

3. Results

3.1. First stage of analysis

As a first step, all semantically inverted items were recoded so that greater response values would always indicate higher levels of the measured construct. Individual item distributions were then analyzed in search of any anomalies. The data were then subjected to a principal components analysis (PCA) with the varimax rotation and using the Kaiser termination criterion. The examination of scree plots led us to select a solution that allowed for the extraction of six dimensions, which together explained 41,3 % of the variance of the results.

A general appreciation of the PCA results indicated that the first emerging dimension was consistent with the theoretical dimension related to teacher feedback, but only for the discipline that the student did not like. Feedback in the discipline that the student liked emerged as the third dimension. The fifth emergent dimension also presented aspects related to teacher feedback. However, while the first two dimensions of Feedback emphasize what is recognized in the literature as characteristics of effective feedback, the fifth additional dimension emphasized aspects person-centered Feedback, considered less effective, even counter-productive.

The second dimension that appeared in the PCA was associated with the perception of behavioral engagement of the student. However it did not distinguish between items for the discipline that the student liked and items relating to the discipline disliked.

Regarding the fourth PCA dimension, associated with school identification, the contents of the 14 items listed seemed to suggest the existence of possible hidden theoretical subdimensions.

Finally there was a sixth empirical dimension that emerged and was not foreseen in the theoretical design. This scale consisted of five items that referred to issues of acceptance and social integration in school.

At this stage of the analysis, therefore, a series of decisions were made. It was decided first to remove and items with a loading factor value < .3. I was also decided to maintain the theoretical division between engagement in the discipline liked and not liked. Finally it was decided to carry out an additional PCA on the set of 14 items that composed the fourth dimension (school identification) in order to clarify the existence, or not, of potentially useful subdimensions.

3.2. Second phase of analysis

Table 1 presents the composition and characteristics of the final QFITE dimensions of School Identification and Social Acceptance. Following the recommendation of Sijtsma (2009), in addition to reporting the value of coefficient alpha, we also report the value of lambda-2.

Table 1. QFITE Dimensions. Internal Consistency Coefficients and Corrected Item-Total Correlations

Dimension	Item	r [a]	α [b]	λ_2 [c]
Total School Identification	I identify with the school I attend (PF)	.35	.82	.83
	I like the teachers in my school (PF)	.42		
	I only go to school because I have to (CW)*	.37		
	My teachers never considered me a good student (CW)*	.40		
	My skills make me be confident about my future (CW)	.51		
	I have the abilities necessary to enter university (CW)	.46		
	What I learn in school will be useful for my future (U)	.60		
	The grades I have in school determine my future (U)	.56		
	I am going to finish secondary school (U)	.38		
	At school I've had opportunities to discover that I can do new things (PF)	.39		
	My future depends on what I do at school (U)	.51		
	I do not care about grades, as long as I pass the year (CW)*	.32		
	For me, getting good grades is a guarantee of a good future (U)	.50		
	For me, going to school is an enriching experience (PF)	.56		
Social Acceptance	I am happy in this school	.26	.51	.51
	At school my classmates make fun of me *	.31		
	I make friends easily at school	.29		
	At school I feel alone *	.33		
	When I participate in group discussions , I feel that my opinion is valued	.23		

Note. Three subscales of Identification emerged: Utilitarian (U). α = .75; Capacity and Will (CW). α = .64; Personal Fulfilment (PF). α = .61.

Items with inverted coding are indicated by an asterisk (*).

[a] r – Item-total corrected correlation. [b] α – Cronbach's *alpha*. [c] λ_2 – Guttman's *lambda 2*.

Table 2. QFITE Dimensions. Internal Consistency Coefficients and Corrected Item-Total Correlations by Discipline Liked and Not Liked

		Liked Discipline			Discipline not Liked		
Dimension	Item	r [a]	α [b]	λ_2 [c]	r [a]	α [b]	λ_2 [c]
Effective Feedback	The teacher explains what we are expected to learn the in discipline	.56	.81	.82	.65	.89	.89
	The forms of assessment in the discipline are presented clearly	.55			.66		
	The teacher makes specific comments to help us to do work that we are doing	.62			.72		
	The teacher gives us opportunities to improve our work / grades	.49			.65		
	Grades are communicated and explained to each student	.46			.63		
	Different forms of assessment (not only written tests) are used	.31			.47		
	When we do an assignment, the teacher clearly describes what is not right and makes suggestions to improve	.58			.69		
	The teacher asks questions that help us to reflect on the quality of our work	.54			.68		
	The tone of voice and facial expression of the teacher show a belief that we can do better	.59			.63		
Person-Centered Feedback	When communicating grades, the teacher makes nasty comments	.58	.77	.77	.57	.77	.77
	The teacher says more about the way we are than about the quality of our work	.53			.56		
	The teacher comments show a lack of respect for students	.64			.62		
	The teacher says to do better, but does not say how	.52			.53		
Behavioral Engagement	I ask questions when I do not understand the material	.41	.77	.77	.55	.84	.84
	I do the homework	.49			.60		
	I go to school willingly	.47			.52		
	I take notes while in class	.39			.54		
	I work to understand the material, even when it is difficult	.58			.69		
	I pay attention in class	.57			.65		
	I study the material given in class	.57			.66		

Note. Items with inverted coding are indicated by an asterisk (*).

[a] r – Item-total corrected correlation. [b] α – Cronbach's *alpha*. [c] λ_2 – Guttman's *lambda 2*.

The first dimension was termed Total School Identification (TSI; α =.82). These 14 items were subjected to an additional PCA that revealed three subdimensions of School Identification: (a) Utilitarian Identification (U, five items, α =.75); (b) Capacity and Will (CW, five items, α =.64), and; (c) Personal Fulfillment (PF, four items, α =.61).

The dimension of Social Acceptance (SA, five items, α =.51) emerged unexpectedly from the PCA. Though its internal consistency is weak, we include it here for its eventual research interest.

Table 2 presents composition and characteristics of the feedback and engagement dimension of the QFITE. tThe size on the perception of students on teacher feedback was considered as consisting of four factors : (a) Effective Feedback in a discipline liked (EF_L , nine items, α =.81); (b) Effective Feedback in a discipline not liked (EF_{NL}, nine

items, α =.89); (c) Person Centered Feedback in a discipline liked (PF_L, four items, α =.77), and; (d) Person Centered Feedback in a discipline not liked (PF_{NL}, four items, α =.77).

Student self-perception about their behavioral engagement in school is measured by the QFITE in two dimensions (a) Engagement in a discipline liked (E_L, seven items, α =.77), and; (b) Engagement in a discipline not liked (E_{NL}, seven items, α =.84).

4. Conclusions

Empirical evidence about the roles of engagement, teacher feedback and school identification on school trajectories have typically emerged in the literature in isolation from one another and without any clear integration. While the intersecting influence of these factors may be apparent, it has often been impractical to include them all in a single study.

This article described the metric qualities of the dimensions of the QFITE as a first step in allowing the simultaneous study of these factors and their impact on school trajectories. The dissemination of the instrument will aid in its eventual validation.

The QFITE shows good sensitivity in its power of discrimination among subjects. It also displays good levels of reliability, with seven major scales yielding internal consistency values greater than α = .75. Three subscales of the construct School Identification, while manifesting lower levels of internal consistency, may be useful for research purposes. Finally, an unforeseen dimension of Social Acceptance will require further development in order to be useful. Using the Spearman-Brown prophecy formula, we can estimate that about 12 additional parallel items (16 total) would be required to bring the scale up to acceptable levels of reliability.

The QFITE was constructed theoretically and tested empirically. Despite its good metric characteristics, it is recommended that future studies make use of other techniques to analyze its convergent, divergent, and predictive validity. It is important to develop new research that will allow the confirmation of the results here reported and, the continuation of the process of validation of the instrument. The QFITE is expected to be an asset in the study of the dynamics and consequences of the relationships among teacher feedback, student engagement, school identification, and educational trajectories.

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References

Abrantes, P. (2003). Identidades juvenis e dinâmicas de escolaridade. *Sociologia, Problemas e Práticas, 41*, 93-115.

Abrantes, P. (2008). *Os muros da escola: As distâncias e as transições entre ciclos de ensino.* Tese de doutoramento, Instituto Superior das Ciências do Trabalho e da Empresa – Instituto Universitário de Lisboa (ISCTE – IUL), Lisboa, Portugal.

Archambault, I., Janosz, M., Fallu, J., & Pagani, L. (2009). Student engagement and its relationship with early high school dropout. *Journal of Adolescence, 32*, 651-670.

Black, P., & Wiliam, D. (1998). *Inside the black box: Raising standards through classroom assessment*. London: School of Education, King's College.

Black, P., Harrison, C., Lee, C., Marshall, B., & Wiliam, D. (2002). *Working inside the black box: Assessment for learning in the classroom*. London: GL Assessment.

Brookhart, S. (2008). *How to give effective feedback to your students*. Alexandria, VA: Association for Supervision and Curriculum Development.

Carvalho, C., Conboy, J., Santos, J., Fonseca, J., Tavares, D., Martins, D., Salema, M., Fiuza, E., Gama, A. (2014). *Feedback, Envolvimento e Identificação Escolares: Propriedades psicométricas de um Questionário sobre Perceção dos Alunos*. Unpublished manuscript.

Carvalho, C., Freire, C., Conboy, J., Baptista, M., Freire, A., Azevedo, M., & Oliveira, T. (2011). Student perceptions of secondary science teachers´ practices following curricular change. *Journal of Turkish Science Education, 8*(1), 29-41.

Conboy, J. (2011). Retention and science performance in Portugal as evidenced by PISA. *Procedia Social and Behavioral Sciences*, *12*, 311-321.

Conboy, J., Moreira, I., Santos, I., & Fonseca, J. (2013). Práticas e consequências da retenção escolar: Alguns dados do PISA. In L. Veloso & P. Abrantes (Org.), *Sucesso escolar: Da compreensão do fenómeno às estratégias para o alcançar*. Lisboa: Mundossociais.

Finn, J. (1993). *School engagement and students at risk.* Washington DC: National Center of Educational Statistics.

Finn, J., & Rock, D. (1997). Academic success among students at risk for school failure. *Journal of Applied Psychology 82*(2), 221-234.

Fredricks, J., Blumenfeld, P., & Paris, A. (2004). School Engagement: Potential of the concept, state of the evidence. *Review of Educational Research Spring, 74*(1), 59-109.

Freire, S., Carvalho. C., Freire, A., Azevedo, M., & Oliveira, T. (2009). Identity construction through schooling: Listening to students voices. *European Educational Research Journal, 8*(1), 80-88.

Gee, J. P. (2000). Identity as an analytic lens for research in education. *Review of Research in Education, 25*, 99–125.

Handelsman, M., Briggs, W., Sullivan, N., & Towler, A. (2005). A measure of college students' course engagement. *Journal of Educational Research, 98*, 184-191.

Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement.* New York: Routledge.

Hattie, J., & Timperlay, H. (2007). The power of feedback. *Review of Educational Research 77*(1): 81-112.

Haynes, S., Richard, D., & Kubany, E. (1995). Content validity in psychological assessment: A functional approach to concepts and methods. *Psychological Assessment, 7*(3), 238-247.

Johnson, M., Crosnoe, R., & Elder, G. Jr. (2001). Students' attachment and academic engagement: The role of race and ethnicity. *Sociology of Education, 74,* 318-340.

Jordan, W., & Nettles, S. (2000). How students invest their time outside of school: Effects on school-related outcomes. *Social Psychology of Education, 3,* 217-243.

Klapam, A., & Flum, H. (2012). Identity formation in educational settings: A critical focus for education in the 21st century. *Contemporary Educational Psychology, 37*(3), 171-175.

Klassem, S. (2006). Contextual assessment in science education: Background, issues, and policy. *Science Education, 90*(5), 820-851.

Kluger, A. N., & DeNisi, A. (1996). The effects of feedback interventions on performance: Historical review, a meta-analysis and a preliminary feedback intervention theory. *Psychological Bulletin*, *119,* 254-284.

Martins, D., Carvalho, C., Gama, A. P., Carvalho, C., Tavares, D., Fiúza, E., Fonseca, J., Conboy J., Salema, M. H. & Valente, M. O.(2013). Eu e eles: a construção da identidade em alunos do ensino básico. *Atas do I Colóquio Cabo-Verdiano- nas Pegadas das Reformas Educativas*. Praia: Universidade de Cabo-Verde.

Marzano, R. J. (2003). Using data: Two wrongs and a right. *Educational Leadership*, *60*(5), 56-60.

Pollock, J. E. (2011). *Feedback: The hinge factor that joins teaching and learning*. Thousand Oaks, CA: Corwin Press

Pollock, J. E. (2012). How feedback leads to engagement. *Feedback for Learning, 70*(1), retrieved from URL: http://www.ascd.org/publications/educational-leadership/sept12/vol70/num01/How-Feedback-Leads-to-Engagement.aspx

Rogoff, B. (1999). Introduction: Thinking and learning in social context. In B. Rogoff & J. Lave (Eds.), *Everyday cognition: Development in social context*. New York: Harvard University Press.

Sendziuk, P. (2010). Sink or swim? Improving student learning through feedback and self-assessment. *International Journal of Teaching and Learning in Higher Education, 22*(3), 320-330.

Sijtsma, K. (2009). On the use, the misuse, and the very limited usefulness of Cronbach's Alpha. *Psychometrika, 74*(1), 107-120.

Schussler, D. (2009). Beyond content: How teachers manage classrooms to facilitate intellectual engagement for disengaged students. *Theory in Practice, 48*(2), 114-121.

Tavares, D. (2007), *Escola e identidade profissional - o caso dos técnicos de cardiopneumologia.* Lisboa: Colibri / IPL.

Valente, M.O., Conboy, J., & Carvalho, C. (2009). Student voices on how engagement is influenced by teacher's communication of evaluation results. Paper presented at the European Conference on Educational Research, Vienna, September 28-30.

Veiga, F., Galvão, D., Festas, I., & Taveira, C. (2012). Envolvimento dos alunos na escola: Variáveis contextuais e pessoais – Uma revisão de literatura. *Psicologia, Educação e Cultura, 16*(2), 36-50.

Wenger, E. (2007). *Communities of practice: Learning, meaning and identity*. Cambridge: Cambridge University Press.

Wubbels, T., & Levy, J. (1993). *Do you know what you look like? Interpersonal relationships in education.* Washington, DC: Falmer Press.

Zimmermann, B.J., & Schunk, D. H. (2001). *Self-regulated learning and academic achievement: Theoretical perspectives*. Mahwah, NJ: Lawrence Erlbaum.

Zimmermann, B.J., & Schunk, D. H. (2007). *Motivation and self-regulated learning: Theory, research and applications*. Mahwah, (NJ/London): Lawrence Erlbaum.