

# FACILITATING EFFECTIVE STUDENT PARTICIPATION IN AN ONLINE ENVIRONMENT

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## ABSTRACT

This study aims to show how student participation in an online environment can be effected through voice feedback. For many Universities student evaluations are an important issue. Student evaluations and student results are largely dependent on student-teacher relations. Establishing such a relation is a challenge in an online environment because the teacher is not physically present. As such, it is essential that means are found to achieving a personal relation within the online environment. We have endeavoured to lower the threshold to such contact by exploiting tools that enable a more personal online relation. Vocal feedback to assignments or discussions allows for a more personal approach that could still be deemed professional in ways that solely written feedback cannot.. Two studies were conducted with two groups of students: one in the Netherlands and one in the United States. Both groups were students in a higher vocational institute who received part of their education in an online environment. Most students favoured vocal feedback and whilst some students are more visible learners and preferred to read feedback rather than listen to it, they still felt that contact between them and the teacher had become more personal as a result of vocal feedback.

**Key words:** online environment, vocal feedback, teacher-student relation, learning styles, student satisfaction

**HYPOTHESIS:** teacher-student relations can be improved in an online environment through vocal feedback

## INTRODUCTION

Academic Institutes face the task of helping students reach their best achievements whilst at the same time reaching their own highest possible students evaluations. This task is a sensitive issue in that universities are eager to receive positive evaluations from students whilst at the same time having an obligation to raise boundaries and exert corrections. In an effort to establishing a teacher-student relationship through teaching presence in an online environment vocal feedback was used to respond to students' questions and assignments. Since both authors carried out this intervention in different countries it was decided that it would be interesting to compare results, hence an Evaluative Research has been carried out. Both authors felt that as a pilot, an informal research would be desirable at this point. If in this try-out period vocal feedback turns out to be successful, a more extensive research will be carried out.

## EVALUATIVE RESEARCH: THEORETICAL FRAMEWORK

It has been suggested that a positive contact, and in particular personal contact, can effectively overcome the dilemma of setting boundaries whilst striving for positive evaluations. Establishing personal contact with students results in creating learning environments that support students' active engagement both academically as well as socially (Hamre & Pianta, 2001). The impact that teachers have on students' social and academic outcome as a result of providing support in the learning environment continues to play a role in the long-term trajectory of school and even beyond, into the employment world (Silver et al., 2005). It has been shown that positive

relationships between teachers and students are associated with positive academic achievements (Cataldi et al, 2009).

It is argued that the academic improvement as a result of teacher-student relationships is due to an increase in students' motivation to learn (Wentzel & Wigfield, 1998). In fact, it is claimed that motivation is the key role between academic achievements and teacher-student relationships (Fan & Williams, 2010; Wentzel, 2003). It appears then that a positive relationship between teacher and student increases students' motivation to learn, which in turns increases students' academic performance. Presumably then when students appreciate the contact they have with their teacher, the distance between the teacher and student is narrowed to the extent that the student is actually willing to carry out the work given by the teacher. However, when students largely participate in classes through an online environment it becomes a challenge to establish personal contact since the teacher is not physically present.

One of the most significant factors in improving academic performance and building a teacher-student relationship is social presence. In an online environment the teacher is not present which creates a challenge in establishing teacher-student relationships through social presence. "Presence in this context also considers student perceptions of instructor involvement as a central factor. High levels of engagement, studies indicate, lead to higher levels of student achievement, greater likelihood of graduation, and deeper satisfaction" (Oblinger, 2014, p 14)." Many online courses rely on asynchronous and non-visual communication, resulting in time delay and a lack of body language. Much of the teacher presence in an online environment is established through instructional management such as web lectures, screencasts, as well as virtual classrooms and forums among others. Many of these applications need studio or other technical facilities which can run into high expenses. In addition, many of these approaches are focused on instructions whereas much of the teacher-student relationships is established through personal feedback.

Establishing a teacher-student relationship through personal feedback requires a form of teacher presence whilst still operating within the online environment. This can be done synchronously through, for example, web tools such as Skype or Google Hangout, however, establishing the time in which this can take place takes away the main benefit of online studies namely that of relatively time independence, i.e. asynchronously. It seems then that a tool is needed that will allow teacher presence through personal feedback in the online environment through asynchronous means. The type of feedback should enhance the establishment of a teacher-

student relationship. Presumably then the feedback should allow some form of emotional contagion.

It has been suggested that emotional contagion can be produced through vocal feedback as there appears some sort of link between emotion and vocal feedback (Hatfield et al, 1995). Providing feedback to online discussions or assignments then becomes more personal when voice feedback is used. Accordingly, providing vocal feedback through a web tool would seem to enhance some teacher presence in an online environment hence improving student-teacher relationships, and as such improving students' motivation to learn, and thus positively affecting students' academic achievements.

## METHOD

**Subjects:** For our study we had two groups of students, one in the U.S. and one in the Netherlands that participated in higher education. Subjects in the Netherlands were graduate students. Their average age was 35. Subjects were of Dutch, Indonesian and Surinam ancestry and were representative of The Netherlands' multi-ethnic population. A total number of 25 Dutch students participated in the pilot. Subjects in the U.S. were undergraduates. Their average age was 32.5. Subjects were mostly from the northeastern region of the U.S. (New Hampshire and Massachusetts, as that is where the main campus is located). Currently there are over 60,000 students online at this non-profit, private university.

**Procedure:** The experimenters began during a F2F session by explaining the method of feedback. Students were instructed on how to install the vocal feedback tool, 'Vocaroo' and were informed on how and when to access Vocaroo. The vocal feedback tool was used for both feedback on the forum as well as feedback on personal assignments during a period of three months. Since this was a pilot study, no triangulation has taken place. The only means of data gathering was students' opinion on vocal feedback after the three-month trial. Students were asked to give their opinion during the f2f meetings and through deep interviews. The salient questions asked during the deep interviews were: Did you like vocal feedback? Why/why not? Would you use vocal feedback for your own students in the online environment? Why/why not?

## RESULTS

Most of the Dutch students responded to the questions; 21 of the 25 Dutch students liked the vocal feedback, whilst four preferred written feedback. The students commented that it was "nice to hear your [the teacher's] voice". In

interviews students said that they liked to hear the emotions in the instructor's voice, her enthusiasm when feedback was positive, her solemnness when feedback was critical, and even her hesitations and natural speech (such as the inclusion of "erm", and so on). They felt that it made them feel less aware of any digital gap, "as if you [the instructor] were there". Even the four students that preferred written feedback felt it was pleasant to hear the instructor's voice. In response as to why they preferred written feedback, they answered that written feedback made it possible for them to print out and write notes, or simply because they are more visually inclined. Surprisingly all the students would use this tool for their own students. The students who preferred written feedback supported this answer by explaining that most Dutch high school students have quite a lot of written input but lack spoken input by the teacher - vocal feedback was a great way to supplement this.

Below are six examples of student feedback (intentionally unedited) that fully embraces the reception of voice feedback by the US students, as well as reflections on the value of using this technology to build relationships between the student and the instructor in fully online courses.

"Thank you so much for the audio response to my work so far. It made me feel so much better knowing you are a real person! I know that sounds weird but online school is kind of scary and that was just really nice to hear a voice. Thank you so much again."

"What kind words you have left for our instructor! I would like to think that we leave this class not only with a sense of accomplishment but Dr. B can too, knowing that she did her part in ensuring that we make the proper choices in order to be successful. It makes me excited to see what other instructors will have in store for us although they have some big shoes to fill. By her using the recordings to personalize and talk to us and give feedback on our assignments made this class feel like much more than just an online class. I wasn't expecting a connection or relationship with a teacher through online classes but am pleased to see that I was wrong. I enjoy this much more than a screen to screen relationship. Good luck to you all and enjoy your classes!"

"Dr. B has really helped encourage me as well! I was not expecting a verbal response but when I listened to the first one, I felt like I had finally made it to college! I mean, I know we are all enrolled and classes had started, but to hear her voice talking to me about my work, made me feel a bit more accomplished. I know this is going to be a challenging journey for me, but if I have any more

instructors like Dr. B along the way, this experience should be a good one."

"I also really enjoyed the verbal feedback, it was good to actually hear a teacher saying good job, or you need to work on this. I will use all of the lessons I have learned in this class for the rest of my life. Thank you for teaching me and the rest of the class Dr.B! I wish everyone the best of luck continuing on in your journey!"

"Hello! I just listened to the verbal response you left me for last week's discussion, I wanted to thank you for the kind words that made my day. I am glad to be starting out my path to success with you as an instructor. Also, I find it funny that we're both Blair's. I have high hopes for what the future holds in regards to my time in school. Thank you for being a great professor."

## DISCUSSION

Whilst some students are more visible learners and preferred to be able to (re) read feedback, the majority of the students felt that it was pleasant to hear the instructor's voice. It seems that vocal feedback could contribute to closing the otherwise digital gap. It appears then that using vocal feedback enables a more personal approach whilst remaining professional in ways that is more difficult with stagnant written texts. Whilst not part of this pilot study, it appears that vocal feedback even provides language teachers with an extra means of target language input.

## LIMITATIONS OF PAPER

This research was carried out in two different countries with two different groups. Whilst the results appear promising and seem to confirm our hypothesis, it should be noted that the demographic differences could have positively influenced the results. In addition, the intervention was carried out through a period of three months. In order to get more objective results the intervention should perhaps last for a longer period of time and be carried over different groups and different courses. In the case of the students from the Netherlands, the student group participated in a course that teaches them the basic elements of implementing flipped classroom principles. Such a student group naturally has more affinity with ICT and web tools and are therefore more inclined to appreciate the implementation of the same. Lastly, the instructor's enthusiasm when introducing the intervention might inevitably have positively influenced the results.

## RECOMMENDATIONS

In order to achieve more objective results we recommend that the study is carried out over a larger period of time and with students varying in ages as well as course subjects. Since the results of this pilot study appear promising we recommend that an official Evaluative Research be carried out in order to get reliable and valid results.

## REFERENCES

- [1] Cataldi, E. F., Laird, J., & Kewalramani, A. (2009). High school dropout and completion rates in the United States: 2007 (NCES 2009-064). Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.
- [2] Fan, W., & Williams, C. M. (2010). The effects of parental involvement on students' academic self-efficacy, engagement and intrinsic motivation. *Educational Psychology*, 30(1), 53-74.
- [3] Hamre, B.K., & Pianta, R. C. (2001). Early teacher-child relationships and the trajectory of children's school outcomes through eighth grade. *Child Development*, 72, 625-638.
- [4] Hatfield, E., Hsee, C. K., Costello, J., Weisman, M.S., Denny, C. (1995), The Impact of Vocal Feedback on Emotional Experience and Expression. *Journal of Social Behaviour and Personality*, 10 (2), 291-312
- [5] Oblinger, D. (2014). Designed to engage. *EDUCAUSE Review*, vol. 49, no. 5 (September/October 2014)
- [6] Silver, R. B., Measelle, J. R., Armstrong, J. M., & Essex, M. J. (2005). Trajectories of classroom externalizing behavior: Contributions of child characteristics, family characteristics, and the teacher-child relationship during the school transition. *Journal of School Psychology*, 43(1), 39-60
- [7] Wentzel, K. R., & Wigfield, A. (1998). Academic and social motivational influences on students' academic performance. *Educational Psychology Review*, 10, 155-175
- [8] Wentzel, K. R. (2003). Sociometric status and adjustment in middle school: A longitudinal study. *The Journal of Early Adolescence*, 23(1), 5-28.