self-confidence as well. Relative to the constructs of Attention, Relevance, and Satisfaction, Confidence, or students' perceived proficiency in using available learning features, linked to motivation most prominently in the EFL learning contexts. This research thus called attention to reinforcing of self-directed learning resources with user-friendly and practical features to build students' self-confidence which would directly affect their perceived English learning progress, and indirectly their learning motivation.

## 5. Conclusion

This study investigated the technological university students' perceptions of the Live DVD Self-learning System by testing a hypothetical structural equation model involving the ARCS measurement model and a structural model comprising the latent variables of ARCS and Selfassessed Skills. Factors of Major and English Level were also examined as to whether they influenced students' ARCS motivations. Statistical procedures of confirmatory factor analysis, ANOVA and SEM were performed for data analysis and interpretation. The results of the study suggested an English Level effect on Attention, and a Major effect as well as a Major\*English Level interaction effect on Satisfaction, engendering implications for improvement of placement test validity and reliability and teaching practice of Level A classes. More important, Confidence was validated to be the sole construct of the ARCS motivations that affected student selfassessed skills, a result that highlights the critical need of constructing self-directed learning resources in a way that would facilitate student utilization and best build self-confidence. The results of this research are significant and would be applicable to technological and vocational higher education institutions in Taiwan

with similar student backgrounds for English education reform and curriculum improvement.

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